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This study of the state college system was undertaken by a private planning firm for the board of trustees of the Connecticut state college system. The purpose was to survey the present status of the college system in relation to the educational needs of Connecticut, and to discuss the feasibility of establishing new colleges to meet these needs. Based on projected population trends, the recommendation given is that a six college system or nine college system located in major population concentrations can satisfy these needs. Expansion of the present institutions is also discussed. The appendixes give detailed pertinent data about Connecticut and the four existing state colleges, estimates of probable development costs and possible timetables for development, and some considerations on relocation. (HH)

NEW STATE COLLEGES IN CONNECTICUT

A PLANNING STUDY & RECOMMENDATIONS
PREPARED BY
DOBER, WALQUIST AND HARRIS, INC.
CAMBRIDGE, MASSACHUSETTS, FOR
THE BOARD OF TRUSTEES FOR
CONNECTICUT STATE COLLEGES

1967

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OFFICE OF EDUCATION

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February 28, 1967

Dr. Harold J. Bingham
Executive Secretary
Board of Trustees
Connecticut State Colleges
80 Pratt Street
Hartford, Connecticut

Dear Dr. Bingham:

We are pleased to submit the final report of our study of the State Colleges in Connecticut, with particular attention to the feasibility of starting new ones.

During the course of our work, the Board, the Presidents of the Colleges, their staffs, and many organizations and private individuals in the State have extended to us valuable assistance, counsel, and information. We particularly appreciate the continuing interest they have shown in this undertaking, the courtesies they have extended our staff, and the sharing of insights and evaluations as we gave shape to our final recommendations. The conclusions we have drawn from those discussions, of course, are entirely our own.

We believe early action on our report could be a prelude to a State College system of genuine distinction and service to the citizens of Connecticut. Please be assured of our support of any measures that may carry such a plan to completion.

Sincerely,

Richard P. Dober

Richard P. Dober
DOBER, WALQUIST AND HARRIS, INC.

RPD:aj
Enclosure

44A BRATTLE STREET CAMBRIDGE MASSACHUSETTS 02138 CABLE: PLANDARCH

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SECTION I

INTRODUCTION

One out of four people in Connecticut are full-time students or teachers in formal, accredited educational programs. If we consider the number of people indirectly involved in education (supporting clerical and administrative staffs, suppliers, construction firms, printers, bus drivers, parents, alumni, and many other groups), it is evident that no other activity in the State touches upon the lives of so many people.

Higher education lies at the apex of this universal condition. It may well be the single most important asset the State of Connecticut now enjoys: as a generator of economic growth, as an instrument for social change, as a source of cultural continuity.

Higher education today is as elemental as energy resources and as necessary as capital formation for progressive development. It is a resource in which Connecticut is rich--but one which, until the recent past, has not been fully represented in the public sector.[1]

Under Public Act 330, of the 1965 Legislature, the State took strong action to improve public higher education in Connecticut. The roles of the State Board of Education and the University of Connecticut have been strengthened and two new Boards established to guide the affairs of the State Colleges and Regional Community Colleges. A Commission for Higher Education was formed to help coordinate all the public efforts.

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[1] This condition is changing. In 1966/67, out of a total 51,027 full-time undergraduate students in Connecticut, 26,362 students were enrolled in public institutions. The percentage of public full-time undergraduate enrollment has moved from 46.4 per cent in 1955 to 51.7 per cent in 1966/67. The State College's share of the *public* full-time undergraduate enrollment in 1966/67 was 41.9 per cent, or 11,056 students. This compares with 30.9 per cent or 3,308 students in 1955.

Public Act 330 assigned to the Board of Trustees of the State Colleges the responsibility of managing funds and personnel for Danbury State College, Southern Connecticut State College, Willimantic State College, and Central Connecticut State College. The Act re-affirmed responsibility for conferring degrees in education for public school personnel and in liberal arts programs. For a number of reasons, responsibility has engendered crisis.

Within their presently defined roles the State Colleges anticipate that they will have to accommodate at least 16,000 additional students by 1975--more than twice their present enrollment in an eight-year span. This growth comes at a critical time in the Colleges' histories: their present facilities are now close to capacity, housing construction scheduled for completion in 1969 will just meet the 1965 demand, and the period for comfortable decision-making on long-range capital construction improvements late in the decade has already passed.[2]

There are also serious questions as to whether or not the available land and location of two of the State Colleges is suitable from a long-range planning point of view. As we will detail later they have not reached the size where investment in physical plant rules out their re-use for some purpose other than a four-year State College, thus the issue of whether or not to continue to invest in the present sites is not yet foreclosed.

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[2] It takes at least four years to properly plan, program, design, construct, and fit out a major academic building. Many states use a five-year capital construction budget to avoid the costs and expediencies of crash programs. The State Colleges have no approved and committed capital construction programs beyond 1969. If they are to meet their enrollment forecasts, sizable new construction must be anticipated. Using a four-year lead time on decision-making the critical years now are 1970-71.

The question of number and locations of State Colleges has to be faced. The fact that Connecticut has not founded a new four-year college in the last 50 years is of equal importance. Since the State Colleges were started in their present cities, the urbanization patterns of Connecticut have drastically been altered, new technologies have been introduced, the automobile has become the common carrier, the scale of time-distance between one place and another in the state has been considerably reduced, styles of life have improved, per capita income has risen, and higher education has been established as a common expectation for most of the youth in the state.

Finally, the most rational basis for making these decisions is not available, that is: a documented, approved, comprehensive long-range plan.[3] As the Board is just two years old no such plan yet exists.

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[3] As evident in the long-range plans for public college systems in other states, the central elements of such a plan would include the following:

A long-range academic plan. This would include a description of general educational objectives and a detailed accounting of how existing and new departments intend to meet the general goals and objectives. It would include research and staffing plans and a broad view of required physical facilities. In our judgement, such a plan is best when generated internally by departments, directed by the individual Colleges, and then coordinated by the Board.

In Connecticut, the plan would also be concerned with the relationship of the State Colleges to other educational institutions both private and public, now and in the future.

Space utilization study. There would be a system-wide detailed study of how the Colleges use their existing facilities. Such information would be useful in establishing system-wide standards for future development, for judging capital construction

Faced with the need to respond to some of these problems as quickly as possible, the Board of Trustees for the State Colleges has engaged our firm to study the State Colleges in Connecticut, [4] giving attention to the feasibility of establishing new ones; and to take into consideration such factors as population trends and mobility, socio-economic characteristics of the state and regions thereof, the highway network

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3. (Continued) requests, and for working out interim measures that might be needed to meet increased enrollments when, and if, capital construction lags behind enrollments.

   Capital construction program. This would be a documented and agreed-upon long-range capital construction program, listing priorities for action at least five years in advance of opening date of any facility.

   Implementation procedures. To be effective, the plan would have to be accompanied by an agreed-upon set of procedures for keeping the above information current and applicable to changing conditions and circumstances.

   Individual State Colleges in Connecticut have undertaken studies that cover some of the above items, but there are no overall, coordinated guidelines for the entire system now available. The development of such a comprehensive plan would probably take two to three years of intensive study, discussion, and decision making.

4. The present State Colleges, size, and location are:

   Central Connecticut State College
   New Britain, Connecticut: 4435 full-time students

   Danbury State College
   Danbury, Connecticut: 1423 full-time students

   Southern Connecticut State College
   New Haven, Connecticut: 4572 full-time students

   Willimantic State College
   Willimantic, Connecticut: 843 full-time students

   Details as to existing academic programs, part-time students, and other descriptions of the Colleges can be found in Appendix A.

and transportation facilities, the optimum sizes of the Colleges, the objectives and purposes of the Colleges, and their educational and special purposes.

This report summarizes our study and includes recommendations on those issues which we believe are now susceptible to early action and resolution.

The central features of our report give suitable recognition to the special conditions that should encourage the Board to take strong action at a crucial time in public higher education in Connecticut.

The first of the favoring circumstances are those which come about from the public commitment to sustain a strong State University, vigorous Regional Community Colleges, a group of well-rounded State Colleges, and a Commission for Higher Education to coordinate their individual roles and resources towards the common purpose stated in the Constitution of the State: "a system of higher education...dedicated to excellence in higher education."

Second, as a result of consistent and intelligent planning at the State and Regional levels, the probable state-wide pattern of economic growth, population increase, and urbanization is now clear and evident through 1980 and probably to the end of the Century. A suitable context for decision-making on long-range matters is available. This context should be a keystone in any plan the Board might support.

The convergence of these conditions--need, opportunity, and the Board's capability to commit itself to a constructive course of action--give rise to the basic questions:

First, as to number, size, and location, what options are available to respond to the need to accommodate 27,000 full-time students by 1975?

Second, what other things might the Board reasonably propose to do, based on the ideas and information engendered by this study?

On the first question, we have developed a line of inquiry and reasoning that enables us to recommend a first choice among the options available.

On the second question, the proposals we make could be useful to the Board as goals, objectives, and policies which the Board could use in the absence of a documented, long-range plan--as guidelines in formulating and carrying out specific actions for each of its constituent Colleges. The statements could also serve as the Board's present view of long-range purpose in coordinating its overall interests with other units and systems of higher education in Connecticut.

Recommendations

We suggest that no new colleges be started at this time. We recommend that the anticipated enrollment of 27,000 students be met by expanding Central Connecticut State College and Southern Connecticut State College to accommodate 9,000 full-time students each, and that, Danbury State College and Willimantic State College be relocated so that they may be more readily accessible to larger numbers of students now and in the future.

Danbury State College should seek a new site near Danbury, along the proposed improved Connecticut State Highway 7. It should plan to accommodate 3,000 students by 1972 and 6,000 by 1975. The site described would place it in a good location to serve the southwest urbanized regions.

Willimantic should seek a new site along the Connecticut Turnpike, along the Norwich-New London axis. It should plan to accommodate 2,000 students by 1972, and 3,000 by 1975.

By placing two new campuses in the path of anticipated urbanization, the State College system as a whole will be in an excellent position to serve long-range State needs. After 1975 a new college could be started in the area northeast of Hartford. If population trends continue and urbanization patterns are maintained, a sixth new campus may be needed after 1985. An optimum location would be a mid-point on the expressway between Waterbury and Danbury.

The reasoning that we have used to reach these conclusions, our analysis of other alternatives, and our accounting of the benefits to be derived from the selected course of action are described in the pages that follow.

Later in the report we also comment on: enrollment projections, educational programs, faculty and student forecasts, research, library and housing issues, and present capital construction commitments.

SECTION II

NUMBER, SIZE, AND LOCATION

Criteria and Information for Decision-making

We have approached our central question by identifying the options available for satisfying the anticipated enrollments of 27,000 students and by establishing criteria for judging which of the options best suited the existing situation.

Early in our study we suggested various possible model systems for the State Colleges in Connecticut.[5] Each system was based on a predominant theme which would (in theory) outweigh all other considerations in evaluating the best possible future pattern. After reviewing these models, we determined that the following criteria could be applied to making decisions on the size, number, and location of State Colleges in Connecticut. Formulated as questions the criteria are:

1. Will the system meet the need for 27,000 students by 1975 enrolled full-time in the State Colleges?
2. Will the system be sensitive to regional requirements?
3. Will the system strengthen the present major role of the State Colleges: teacher education and general education?
4. Will the units of the system be accessible to the people it is created to serve?
5. Will the system have sufficient opportunity for the development of diversity and variety in programs, activities, and physical plant?
6. Will the system be in conflict with other elements of public higher education in Connecticut?

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[5] Dober, Walquist, and Harris, Inc., Background Memorandum 2, A Preliminary Listing of Model Systems, 7 November 1966.

7. Will the system be in conflict with any private elements of higher education in Connecticut?
8. Will the system be reasonable in terms of cost of education?
9. Will the system be reasonable in allowing opportunities for any unit in the system to grow beyond the size designated in the plan, or, to evolve or change into a different kind of educational institution?
10. Will the system meet the criteria of political realism, i.e. appear reasonable to an objective observer?

In order to help further judge the number, size, and characteristics of the Colleges, available planning documents have been examined to determine what Connecticut is likely to be by 1980.

The amount of documentation prepared over the last five years at the State and Regional levels is impressive, and much valuable information on Connecticut's past and future was drawn from them. Not all of these data statistics, descriptions, and speculations are immediately relevant to our task, though all have been used in making evaluations. From this material, these aspects have been identified as being of direct importance to our work: population growth, components of population change, population distribution, per capita income, composition of the labor force, educational attainment, urbanization patterns, highway development, and community growth factors in the towns in which State Colleges are now located. (Our overall evaluation of the materials is summarized in Appendix B.)

The above information on Connecticut 1980 was most useful in giving a general picture of development in the state, and in the regions, and also in giving weight to the criteria listed earlier. As a result of the study, we believe that accessibility is the key factor in judging number, size, and location.

If State Colleges are located within reasonable travel distance of the major populations in the state, then all other criteria are likely to be satisfied. This is not to say we have devaluated other criteria, for other reasons have also shaped our recommendations, as will be clear in later sections of this report.

Growth Pattern

Connecticut's population is expected to rise from 2.5 million people in 1960 to 3.7 million people by 1980. Not all the population growth will occur uniformly throughout the state. Table B-11, page B28 shows the population expectations in each of the regions in the state. The first five regions ranked in population size in 1960 are expected to hold their rank order in 1980. The sixth and seventh will reverse order of rank by a small change in size. These seven regions, by 1980 population size, and their major central cities (indicated in parentheses) are as follows:

1.	Capitol Region (Hartford)	811,000
2.	South Central Connecticut (New Haven)	617,000
3.	Southwestern Connecticut (Stamford, Norwalk)	410,000
4.	Greater Bridgeport (Bridgeport)	347,000
5.	Central Naugatuck Valley (Waterbury)	289,000
6.	Southeastern Connecticut (Norwich, New London, Groton)	267,000
7.	Central Connecticut (New Britain)	256,000

It is significant that these seven urban regions will accommodate about 80 per cent of the total state population. Much of this urbanization will parallel the major highway networks, existing and planned. A mega-city (conurbation) will extend from the southwest corner of the state through Stamford, Norwalk, Bridgeport, New Haven, Waterbury, New Britain to Hartford, and northward. This mega-city itself will contain almost three-fourths of the state's 1980 population.

Two of the existing four-year State Colleges are right in the center of this heavy population, existing and projected: Southern and Central. Willimantic State College is not in a long-range growth area, and Danbury State College is not in a geographic position to serve any of the seven largest projected urban regions.

In examining this growth pattern, it should be noted that the Capitol Region (Hartford and vicinity) and the Southwestern Region (Stamford-Norwalk and vicinity) can be considered distinctive urbanized areas, each having a set of interrelated land-uses, transportation networks, economic bases, and social characteristics--in effect, cities.

In population size alone these two areas could support, by 1980, a public four-year college.

Though not as dense as mega-city, the land adjacent to the Connecticut Turnpike, along the New London-Norwich axis and in both directions, will also, by 1980, have grown in population large enough to support a public four-year institution.

Other urban regions--Greater Bridgeport, Ansonia-Derby, and Central Naugatuck Valley--are within reasonable driving distance of a four-year State College, or will be on completion of the Connecticut expressway network in the 1970's. (See Illustration 3.)

Some Options

With the above information in mind, two options are readily available--options that would make State Colleges accessible[6] to at least 80 per cent of the 1980 population. These are: a nine-college system and a six-college system.

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[6] Accessible here means within 40 minutes driving time under optimum travel conditions.

The nine-college system would have the four existing Colleges plus five new campuses to serve the Stamford-Norwalk urban area, the Bridgeport-Ansonia urban area, the Waterbury urban area, the Norwich-New London urban area, and the Hartford metropolitan area.

The six-college system is based on convenient driving distances from the centers of the urban regions to existing or new college campuses. Thus the Bridgeport-Ansonia area is convenient to Southern Connecticut State College, the Waterbury area and Hartford area are equally proximate to Central Connecticut State College.

Nine-college System

The advantages of the nine-college system are these:

1. Each major urban region would have a four-year public college sensitive to the educational needs of the area, yet offering a comprehensive college curriculum.
2. The requirements for campus housing would be considerably reduced.
3. Commuting time would be at a minimum.
4. The possible, but not inevitable, impersonalization of the large college would be reduced.
5. The ability to accommodate increased enrollments in the system as a whole beyond the next three decades would be made easier.

The disadvantages are:

1. The cost of developing five new campuses. As outlined in Appendix C, we estimate that about $19 million would be required to develop a new campus for 2,000 students, exclusive of land acquisition and utilities.
2. The cost of operating five new campuses--cost here meaning the costs that are incremental to the number of campuses.

3. The possible difficulties in attracting and holding five additional administrative staffs and five additional academic heads at this particular moment in American higher education. The timing of accreditation would have particular importance, especially since a central activity in the State Colleges is teacher education and early accreditation is important.

Six-college System

Inasmuch as the existing and projected 1980 highway pattern is such that several of the campuses in the nine-college system might be reasonably combined into single campuses, a six-college system could be established. The advantages and disadvantages would be comparable to the nine-college system.

Although there is no known relationship between the size of a college and academic distinction, it is generally held that a larger college can offer greater coverage in breadth and depth of subject matter. Library resources tend to be richer, and a wider variety of physical facilities is made possible through sheer size. Since accessibility criteria can be met in both a six-college system and a nine-college system, then the latter is the second-choice solution to the former. A six-college system is better because it reduces the costs and risk of starting a larger number of colleges and it has the advantages of size.

Development Capabilities of Existing State Colleges

The six-college system assumes that the existing Colleges can be enlarged and continued to be used. Accordingly some comments on their physical capabilities to do so are relevant at this time.

In response to enrollment pressures, all the State Colleges, to varying degrees of detail, have completed guide plans for physical development. We have examined these plans, visited the sites, and evaluated the situation as follows:

Central Connecticut State College. In June 1966, a master plan was prepared by the Committee on Planning and Development of the College in cooperation with a consultant architect.

The plan includes a staged development of present facilities to the year 1975 for a projected enrollment of 10,000 day students. The site design is based on the principle of a loop road around the campus--feeding parking areas at the periphery of the campus with a series of pedestrian malls and courts in the interior--around which academic and dormitory buildings are planned. Wells Street, which now runs through the campus, is expected to be closed off to traffic to become a major pedestrian axis.

The site plan for this future development covers approximately 150 acres, 115 of which are presently owned by the College.

Comparisons with other comparable institutions presently accommodating 10,000 students indicate that the present plan, or some variation thereof, is suitable as a guide to known growth.

Three aspects of the plan require further attention. First is the relationship of the campus circulation and parking to the proposed construction of I 291--scheduled for location near the campus. This expressway will place the campus within reasonable driving distance of large numbers of potential students and other institutions. It means that the probable front door of the College will be close to the highway. Further study is needed to resolve aesthetic and functional problems and opportunities created by this construction.

Second, because of topographic characteristics of the land now held and under possible acquisition, site design of the buildings and the spaces around them should receive special attention. We believe that campus aesthetics should be an important part of the College's educational function. When so much of our urban areas lack amenity and visual delight, it is important that the Colleges demonstrate the efficacy of good design.

Third, the College should study the possible acquisition of an additional fifty acres of land, beyond the forty-five acres now scheduled for acquisition. In Appendix C, we give reasons why a campus of 250 acres is an optimum size for a State College such as Central Connecticut. We recognize that every site is a special situation, and in light of the street and land-use patterns in the vicinity of the College we believe that the present long-range target should be 200 acres.

Danbury State College. In July 1966, a site evaluation study was prepared by a faculty committee at the College. A consultant landscape architect assessed the present campus at Danbury and its environs in terms of accommodating a projected 4,000 student enrollment.

According to the study, from 55 to 75 acres, in addition to the existing 23 acres of the present campus, is desirable to accommodate the stated enrollments. This additional acreage is composed primarily of built-up residential properties, and the rest is commercial and industrial.

In the report, the landscape consultant stated the following (page 4):

> "...A study should be made to determine the feasibility of expanding in the present location as the cost is relatively high ($150,000 - $160,000 per acre) due to the proximity to the (town) center and heavy buildup areas..."

Acquisition costs for 70 acres contiguous to the campus could be as high as $10.5 million. Furthermore, the consultant warned of possible sub-surface conditions and difficult topography, which may also add to the cost of development.

In addition, an examination of the consultant's very preliminary design reveals that a key property (Roberts Avenue Elementary School) within the campus belongs to the Danbury Public School System. It is now unavailable to the College and adds to the difficulty of laying out an adequate campus.

We believe that continued development on the present site would be most difficult. Accessibility is poor. At least 150 acres will be needed for long-range growth. Many of the present buildings do not represent adequate facilities for a thriving College, and few are suitable roots on which to graft enlarged programs and enrollments.

The continued use of the present campus will require expensive land acquisition, many internal changes in existing buildings, and continuing difficulties with campus and community circulation. Relocation should be seriously considered.

As we describe more fully later, relocation here means moving to a larger site within Danbury itself, or in the vicinity thereof. The pros and cons of relocation are further described in Appendix D.

Southern Connecticut State College. While there are present plans for the construction of a number of new buildings on the Southern Connecticut State College campus, there is no staged long-range plan for development of a student enrollment of 10,000 day students--a size comparable to the Central Connecticut long-range plan size.

Present landholdings of the College are approximately 142 acres. This acreage is divided by a number of streets and privately-owned properties, including a cemetery. These factors present real problems in the development of an adequate campus for 10,000 students.

At present, we cannot ascertain whether the existing landholdings could accommodate an enrollment of 10,000 students, or how much additional land may be required in order to do so. In light of the difficulties that site conditions present to the development of an adequate campus, it is recommended that a comprehensive plan for 10,000 students be undertaken indicating land requirements, suitable campus design patterns, and staging of growth.

Inasmuch as the College is well located for sizeable growth, land holdings should be increased. As a minimum, sixty additional acres should be secured as early as possible, and about fifty additional acres later, for a long-range land holding of about 250 acres. The location of the additional acreage and the priorities for acquisition should be part of the long-range campus plan study recommended above.

Willimantic State College. Present landholdings of Willimantic State College are approximately 85 acres. About 10 acres of this total are located on a city block that accommodates a local high school.

In 1965 a development plan for the College was prepared for a long-range plan of 1,500 students on the 65 acres which were in the College's possession at that time. The acquisition of another 20 acres contiguous to the main property holdings and the College's new long-range growth target of 2,500 students have rendered this plan obsolete.

The additional 20 acres have been added in two sections, one to the north and the other to the northwest. Basically, the site will remain a long thin strip of land, with irregular topography. According to the architects preparing the master plan, the 1965 concept of development will not change drastically. The architects believe that the site could be made to accommodate 2,500 students. In order to assure the College the possibility of growth beyond that size, we believe that additional acreage should be acquired.

From this brief examination of development capabilities we can conclude that Central Connecticut State College, Southern Connecticut State College, and Willimantic State College, can expand with additional acreage added to their existing land holdings. Danbury State College faces the most critical physical development problems, and relocation is a good alternative to staying on the present site.

Other Options

The six-college option envisions two new campuses to serve the southwest (Stamford-Norwalk and vicinity) and the southeast (Norwich-New London and vicinity).

Of the two areas, the southwest part of the state has priority, in our judgment. Each succeeding population forecast of recent years for the Southwestern Connecticut Region has shown either higher population expectations than previous forecasts or filling-in of the available land earlier than predicted. This is due to a number of reasons, no one of which itself is predominant, but taken together are impressive.

The southwest area is the hinge for several transportation corridors between the northern and central parts of the Atlantic seaboard. It contains some of the most attractive residential areas in metropolitan New York. Manufacturing employment is concentrated in non-electrical machinery, electrical equipment, and the printing and publishing industries--highly skilled and remunerative economic activities, all with a bright future. Proximity to cultural and recreational resources is excellent.

Because land development opportunities are diminishing, population growth is so vigorous, and the presence of a four-year public college is an ideal way of sustaining high-quality economic growth, immediate action on developing a new College in the Southwestern Region is in the best interests of the State.

Of the two regions under discussion, the Southeastern Region has the smaller population and has the more uncertain development pattern. The region is well served by convenient transportation--both rail and expressway. The latter is only recently opened and its full impact is yet to be felt. Land and labor supply are good.

Present economic activity is largely related to defense industries--transportation equipment, textiles, and other government work. The area has an excellent potential for a diversified economic base, especially industries that may emerge from the development of ocean-based resources. Stronger regional planning support is needed to capitalize on these possibilities, and a new college is a step in the right direction.

The development of these two new campuses raises questions of Danbury State College's and Willimantic State College's competitive position for students, faculty, and capital construction support. We judge that Central and Southern are well located and have ample opportunity to expand their facilities and maintain their present position in the State College system--both qualitatively and quantitatively.

In Appendix D we have elaborated on the considerations which should be entertained in evaluating these questions. The situations of Danbury and Willimantic are not alike, and each instance has to be considered on its own particulars.

Danbury State College. We have already suggested that Danbury might consider relocation solely on the grounds of difficulty in developing their present site. We now suggest that this relocation could be done so as to serve the Southwestern Region as well as Danbury. A site along the proposed new Route 7 expressway, south of Danbury, would, in conjunction with the Merritt Parkway and Connecticut Turnpike, place the campus within reasonable proximity of the urban populations along the coast (Greenwich, Stamford, and Norwalk) as well as in Danbury and vicinity, and the areas in between.

Such a site would obviate any difficulties that might arise out of competing campuses within the same general part of the state. By transferring an existing College to a new site, a vigorous and on-going institution, with accreditation and traditions, faculty and staff could enlarge itself to serve a significant part of the anticipated increase in enrollment in the system.

The new campus would have exceptional cultural as well as locational advantages, especially because of its proximity to New York City, the cluster of private and public institutions around New Haven and Bridgeport, and existing and proposed educational institutions in Westchester County.

We believe that relocation of Danbury to the suggested area is a tenable option, whose advantages outweight the continuation of Danbury on its present site and the development of another College for the Southwestern Region.

The feasibility of this proposal depends in part on finding a re-use for the facilities on the existing campus. In this respect we suggest that, if our recommendation is accepted, the Board begin early discussions with the representatives of the Regional Community Colleges to ascertain their interest in taking over the campus. A second possibility would be the use of the campus by the Henry Abbott Technical School for any extended programs they may wish to support, and this too, might be explored. We believe the existing facilities can continue in use for educational purposes and that further study of this matter will justify the proposal.

Inasmuch as it takes at least five years to open a new campus, we recommend that the Board establish a target date of Fall 1972 for opening the new campus. For reasons to be discussed in detail later in this section, the new campus initially should aim to accommodate 4,000 students, of whom 2,000 would be in residence; with 6,000 students as a 1975 target.

Willimantic State College. In our view, Willimantic seems handicapped today by programs, size and location. These are interrelated problems.

In response to the first, the College would like to expand its present programs in teacher education so as to give more emphasis to programs for the emotionally disturbed, the culturally deprived, and physically handicapped children. It would like to add programs in elementary school education, librarian training, secondary education in the liberal arts, a five year cooperative teacher training program, and a master's degree in various elementary school curriculum. It would like to expand the present liberal arts majors to include sociology, speech, political science, modern foreign languages, art, music, and economics.

To support such programs it would have to grow to at least 2,500 students. Such growth is also desirable for other reasons--such as the ability to sustain a broadly based cultural and social life for the student body and faculty, as well as sports programs and other forms of intercollegiate activity in which strong identification of the College as a singular institution is important.

Without expanded programs and a larger student body, the College will be at a disadvantage in comparison to other State Colleges in the system, and possibly with other educational institutions in the eastern part of the state.

Programs and size are in part a factor of location. Willimantic is not located in a populous section of the state. Accessibility is poor. Population growth of any significant size is not expected in the future. There are no major expressways to the coastal area, and none are scheduled in the present State Expressway Plan. This means most of the increase in any projected or desired enrollment size will have to come from an increase in campus housing. The number of commuter students will probably be limited accordingly. Finally, unless access to Willimantic is improved considerably so that the urban regions are more accessible, certain educational programs may be limited. For example, the number of teacher training centers and critic teacher stations is a direct factor of population size and accessibility, and perhaps no more than 200 teachers a year can be trained at Willimantic under presently known conditions and practices.

If Willimantic is to grow and thrive on its present site, exceptional measures will have to be taken to establish a distinctive residential College, of at least 2,500 students, with experimental programs and a physical plant of character, quality, and vigor sufficient to overcome any handicaps of location.

If new expressways are developed to Willimantic, the present campus will not necessarily be in a good location to satisfy demands generated in the Norwich-New London area. There is thus the alternative of relocating the College to the more heavily populated urban region, rather than developing two colleges in the same part of the state. In our view, such a site should be near the Connecticut Turnpike along the Norwich-New London axis.

All of Willimantic's objectives for enlarged programs and size could be met on a new campus. Important and additional educational advantages would also probably accrue; an increase in the number of teaching stations, more easily achieved training of urban teachers, additional curriculum such as nursing education, a co-op program in business, oceanography courses at the undergraduate level, and a five-year cooperative teacher education program for liberal arts majors. Because of the possibility of large numbers of commuter students, the College, in a long-range view, could probably grow well beyond 2,500 students and such growth would make it easier to develop academic programs beyond the bachelor's level.

We thus recommend that Willimantic State College be relocated to the Norwich-New London area. We further recommend an opening date of fall, 1972, with an initial enrollment of 2,000 full-time students, about two-thirds of whom, in this phase of the College's development, would be in residence. We suggest a 1975 target of 3,000 full-time students.

Again, as in Danbury, the question of re-use must be raised. And again, we believe that the facilities would be suitable for a regional college and that the Board, if our recommendation is accepted, should begin early discussions with the Regional Community College representatives about possible use of the campus.

We believe it is important to emphasize that our recommendations are conditioned on our belief that both Danbury and Willimantic need and can support educational programs typically carried on at the community college level. While it is not within our terms of reference to study such matters, we do urge others to do so.

Number, Size, and Location

Based on the above reasoning, we recommend that there be four State Colleges to accommodate the anticipated enrollment of 27,000 full-time students. Two of these State Colleges would grow on their present sites, two would be relocated. The recommended sizes and locations are:

1. Central Connecticut State College. 1975 full-time enrollment--9,000 students. To expand on its present site.
2. Danbury State College. 1975 full-time enrollment--6,000 students. Relocated to a site along the proposed Route 7 expressway between Danbury and the Merritt Parkway.

3. Southern Connecticut State College. 1975 full-time enrollment--9,000 students. To expand on its present site.
4. Willimantic State College. 1975 full-time enrollment--3,000 students. To be relocated to a site along the Connecticut Turnpike, on the New London-Norwich axis.

SECTION III

STAGING OF DEVELOPMENT

Assumptions

Facilities for 27,000 students by 1975 means at least a doubling of the existing physical plants. Whichever options the Board pursues, a very large construction program lies ahead--perhaps on the order of $125 million. This figure is based on an average capital construction cost of $8,000 per student, and on an estimated 16,000 full-time students added to the present enrollments.

Table 1 is an example of how this growth can be staged for the four-campus system that we have recommended. It helps illustrate some of the problems to be overcome and suggests some of the solutions.

The table is based on the following assumptions:

1. It would take about five years to open a new campus. The earliest feasible opening date is fall, 1972.
2. It would take at least three years to complete any major new construction on an existing campus. Earliest feasible opening date for new construction would be fall, 1970. (This statement does not refer to presently committed capital construction which will be completed earlier.)
3. By fall, 1970, there should be accommodations for at least 16,000 full-time students, and 22,000 full-time students by fall, 1972.
4. Enrollments at Danbury and Willimantic could be stabilized until new campuses are opened. The major growth to 1972 could be carried by Central and Southern Connecticut State Colleges.
5. It is assumed in the table that there will be 12,500 full-time students enrolled in the fall of 1968, and that the number of students added each year thereafter will progressively grow larger.

TABLE 1 February 1967

POSSIBLE DISTRIBUTION OF FULL-TIME ENROLLMENTS - FALL 1968 TO FALL 1975
(All Figures Are Rounded)

	Fall 1966	Fall 1968	Fall 1969	Fall 1970	Fall 1971	Fall 1972	Fall 1975
Existing Size	11,300	12,500	14,000	16,000	18,000	21,000	27,000
Central Connecticut State College	4,400	5,000	5,750	6,750	7,750	8,000	9,000
Danbury State College	1,400	1,500	1,500	1,500	1,500	4,000*	6,000
Southern Connecticut State College	4,600	5,000	5,750	6,750	7,750	8,000	9,000
Willimantic State College	900	1,000	1,000	1,000	1,000	2,000*	3,000
Total	11,300	12,500	14,000	16,000	18,000	22,000**	27,000
Number Added		1,200	1,500	2,000	2,000	4,000	5,000

*New campus opened.

**Slight excess to accommodate possible heavier enrollments than anticipated.

Compiled by DWH.

Some Findings

Assuming that the Board decides to recommend new campuses this spring and that funds are appropriated, the critical years for State College growth will be fall, 1968 to fall, 1971. With stabilized enrollments at Danbury State College and Willimantic State College, the other two campuses, Central and Southern Connecticut State Colleges, would have to accommodate 6,700 additional students. (See Table 1.)

The scheduled completion of $23.6 million of construction by 1969 on the campuses of Central Connecticut State College and Southern Connecticut State College will provide some additional space; but it is not likely to make the campuses any less crowded than they are today. Accordingly, a major construction program should be considered for completion at both campuses for the fall of 1970 and 1971.

Central and Southern Connecticut State Colleges should now be asked to estimate their capacities for full-time enrollment in the fall of 1969. Each should be requested to submit a physical development program for the years 1970 and 1971 (assuming each would have about 3,500 students beyond their present enrollment by fall, 1971).

These proposals should be reviewed and, if reasonable, approved. Measures should be taken to get appropriations to implement the plans. This should be accomplished by June, 1967.

(We bring to the Board's attention that even if it decides to expand the existing campuses at Danbury and Willimantic State Colleges--as opposed to starting new campuses--the above enrollment figures for Central and Southern Connecticut State Colleges would probably still have to be provided for through new construction. If the price of expedient crash programs is to be avoided, decisions on new construction beyond 1969 would have to be this spring or enrollments curtailed three to four years hence.)

Enrollments at Central and Southern Connecticut State Colleges, and in turn construction programs, could be reduced to the extent that Danbury and Willimantic State Colleges can take additional students on their existing campuses beyond the 1,500 and 1,000 we show in Table 1, Column 2.

Accordingly, it would be to the Board's benefit to discuss with representatives of the Regional Community Colleges their interests in the two existing campuses, so as to ascertain the degree to which construction, now scheduled for completion at Danbury and Willimantic State Colleges, might proceed--and thus allow the two Colleges to take additional students and yet not invest so heavily in physical plant that re-use and relocation is not feasible. These discussions should begin as soon as possible.

The jump from 2,500 to 6,000 students (total) at Danbury and Willimantic State Colleges, from 1971 to 1972, could present some difficulties in acquiring faculty and having fairly representative numbers in each of the classes in the College.

On the former matter, about 235 new faculty would be required--at a ratio of 15 students to one faculty member; larger numbers at lower ratios. Some of these may be brought in during the earlier years to help plan the new campuses. Others may be fledgling teachers gaining experience at the Regional Community Colleges in the state or elsewhere, awaiting opening of the new campuses. A majority will probably have to be recruited in what is likely to be a highly competitive market.

The initial size of the two new campuses may reflect the fact that they are on-going institutions. The size of their service area, the fact that normal expansion of enrollments may be somewhat reduced during construction of the new facilities, and that they are likely to open with a significant surge in enrollments.

To reach the target sizes on opening day, it is likely that careful coordination of development of two-year Community Colleges, University Branches, and Technical Institutes in the vicinity of the new campuses is needed, so that they may play a role in having an appropriate balance of campus population in lower and upper division enrollments on opening day. Part of the new campus planning should be concerned with the question of initial size on opening day, and how it is to be reached.

SECTION IV

ACTION PLAN

Based on the recommendations we made earlier, we suggest that the following steps be taken to implement the plan.

Central Connecticut State College

1. Ascertain the capacity of the physical plant in terms of numbers of full-time students that can be accommodated at the completion of the 1969 capital construction program.
2. Ascertain the physical plant requirements to accommodate 3,500 full-time students, beyond the present enrollments, by the fall of 1971.
3. List physical plant requirements in order of priority and probable cost.

The above to be completed by 15 April 1967.

Danbury State College

1. Ascertain the capacity of the physical plant in terms of number of full-time students that can be accommodated at the completion of the physical plant improvements now under construction.
2. Ascertain which of the present capital construction program items not yet under construction should be completed, and the full-time student capacity at completion.
3. Ascertain and make recommendations on the organization of personnel to begin planning for a new campus. Identify staff requirements, budget, and schedule. (See Appendix C for suggested timetable for new campus development.)

The above to be completed by 15 April 1967.

Southern Connecticut State College

1. Ascertain the capacity of the physical plant in terms of numbers of full-time students that can be accommodated at the completion of the 1969 capital construction program.
2. Ascertain the physical plant requirements to accommodate 3,500 full-time students, beyond the present enrollments,

by the fall of 1971.

3. List physical plant requirements in order of priority and probable cost.
4. Ascertain the need and establish procedures to be followed to prepare a documented, long-range plan for 10,000 full-time students on the present campus. Recommend staffing plan and budget.

The above to be completed by 15 April 1967.

Willimantic State College

1. Ascertain the capacity of the physical plant in terms of number of full-time students that can be accommodated at the completion of the physical plant improvements now under construction.
2. Ascertain which of the present capital construction program items not yet under construction should be completed, and the full-time student capacity at completion.
3. Ascertain and make recommendations on the organization of personnel to begin planning for a new campus. Identify staff requirements, budget, and schedule. (See Appendix C for suggested timetable for new campus development.)

The above to be completed by 15 April 1967.

The Board of Trustees for the State Colleges as a Whole

1. Determine its position on the recommendations made in this report. Assuming acceptance, then the following steps should be taken.
2. Consult and review with the Commission for Higher Education, the Board of Trustees for the Regional Community Colleges, and other agencies, institutions, and organizations that may be affected by the plan, the proposals made in this plan.
3. Ascertain from the Connecticut Public Works Department and the Connecticut Highway Department the feasibility of establishing a coordinating group of specialists and administrators within the agencies to help expedite new campus

development and the 1970-71 construction programs.

4. Establish an overall advisory-planning group of representatives from the Board and the Colleges with the purpose of providing a means for exchanging advice, consultation, and experience on matters of physical development which might concern the Colleges, as a group, in the next several years.

5. Define the role and function of the Executive Secretary's professional staff in assisting the development of new campuses and the implementation of the 1970-71 capital construction programs.

The above to be completed by 15 April 1967.

6. Review and reach agreement on information provided by the individual Colleges as to capital construction program needs to 1971 and new campus development to 1972.

7. Prepare requests for funds for executing the various proposals.

The above to be completed by 30 April 1967.

8. Depending on response to (7) above, establish a master schedule for programming, planning, design, and construction of capital facilities to fall, 1972.

9. Assign or reaffirm responsibilities of the Colleges and the Executive Secretary's Office in carrying out the plans.

The above to be completed by 30 June 1967.

SECTION V

THE COLLEGES AND THE SYSTEM - PROSPECTUS *

Introduction

This section of the report is an accounting of our assessment of where the State Colleges stand in meeting their long-range goals. It describes some of their problems and their prospectus for growth. The statements are included in this report in order to provide the Board with information that may enable it to take policy positions on matters related to the physical development of new campuses and continued capital construction on existing campuses. It also brings together general information which may be useful to the Board. The Board will enter into discussions with other units and systems of higher education in Connecticut about the recommendations in this report.

Much of the data used in this section was provided at our request by the State Colleges. A draft of this material was reviewed for accuracy and for possible sources of additional information. The conclusions we have drawn from the information are, however, entirely our own.

In interpreting this information, we recognize that planning is a continuing process of review and evaluation, also, that any policy or plan should be as dynamic a position as conditions, consequences, common sense, and information allow. Inasmuch as the Board does not have a long-range plan, the comments we make should be considered as points of departure for discussion purposes, until such time as a documented, agreeded upon long-range plan is available.

Finally, we want to emphasize that the pages that follow do not adequately detail the important contributions and progress that the State Colleges have made to date.

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* The Tables referred to in the text are in Appendix A.

They show many signs of innovation and consistent growth to higher levels of academic distinction. The circumstances they are in and the problems they face are typical of many aspects of American higher education--national, state, and regional. That they have now been asked to take on a sizeable increase in enrollments and to expand their programs to become comprehensive colleges is testimony to the achievements of more than a century of hard work and dedication to public education in Connecticut.

The Colleges

Tables A-1 and A-2 give a short profile of each of the Colleges. Central Connecticut State College (New Britain) is the oldest College (1849) in the system and today has the largest combined full-time and part-time enrollment. It began as a normal school and has progressively advanced towards being a more comprehensive College as evolutionary changes were made in teacher preparation. Common sense indicated that the State's needs for four-year liberal arts colleges could be met by enlarging the academic provices of the four-year teachers' colleges.

Willimantic State College is the second oldest College (1889) in the system. It, too, has followed a path upwards similar to Central. Until recently, it has been specializing in elementary school education. It is the smallest school in the system.

Chronologically, Southern Connecticut State College (New Haven) was the third college to be founded (1893). Its full-time enrollment is about the same as Central Connecticut State College's, but it has fewer part-time students. The U.S. Office of Education report (Higher Education in Connecticut - 1964) stated that it offers the greatest variety of teacher education programs among the State Colleges. As shown in detail later in this section, it has taken good steps forward to do the same in the liberal arts programs.

Danbury State College (Danbury) is the youngest of the four (1903). Its growth is similar to that of the other schools. In teacher preparation it offers programs in elementary and secondary education, and for two decades has had the responsibility of preparing music teachers. As have the other schools in recent years, Danbury, also, has instituted programs in the liberal arts.

Enrollment Projections

The present planning in the State Colleges is based on an anticipated 1975 full-time enrollment of 27,000 students. This figure was deduced from various projections made for the Commission for Higher Education. We believe that this is probably a minimum enrollment figure for these reasons :

1. The college-age group (18-24) in Connecticut is likely to be larger in the years ahead than in the past years. More than half of Connecticut's population growth will come from natural increase (births over deaths) rather than from migration. A younger population age profile can be expected.
2. The size of the college-age group enrolled in higher education, in general, should increase because of:
   a. A greater percentage of students desiring higher education.
   b. A greater percentage of students qualified for higher education.
   c. Extension of education beyond the Bachelor's Degree level.
   d. Possible programs to reduce attrition rates in the State Colleges.
   e. Added demand generated by improving higher education facilities.
   f. Possible enlargement of opportunity by making higher education economically and physically accessible to an increasing percentage of the State's citizens.
3. It seems likely (but not absolutely) that the private institutions cannot expand in the future at the same rate they expanded in the last two decades. Thus, the percentage of students enrolled in public sector institutions is likely to rise.

4. The State Colleges will share in public higher education a large proportion of this demand because:

   a. Desire among the college-age group to complete at least a four-year degree program.
   b. Enlargement and extension of academic programs in the State Colleges.
   c. Impact of the community colleges in qualifying students for the third and fourth years of college.
   d. Attraction of an improving State College system.
   e. Active counseling programs in the State Colleges to have a larger percentage of students graduate.
   f. Increasing enrollments beyond the fourth year of college.

We suggest that the Commission for Higher Education conduct a detailed state-wide projection of demand for higher education in Connecticut and the probable size of the student body to be accommodated in public institutions. For purposes of present planning, it is acknowledged that the 27,000 full-time students demand may appear prior to 1975. This matter should be continually monitored by the Board.[7]

Degrees and Certificates

Table A-3 lists the present degree and certificate programs offered by the four State Colleges. Also listed are the programs of six private institutions--called public-serving private institutions below--which enroll a significant number of students from Connecticut. These public-serving private institutions have grown in response to State needs in curriculum and degree programs, and in the past absence of public institutions, they have played an important role in education in the State. It is, thus, useful to compare their curriculum to that offered by the State Colleges.

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[7] One factor to consider, for example, is the decline in the birthrate--nationally from 23.7 births per thousand of population in 1960 to 18.5 per thousand of population in 1966.

The public-serving private colleges are

University of Bridgeport
Fairfield University
University of Hartford
Mitchell College
New Haven College
Quinnipiac College

Table A-3 indicates that the State College system as a whole offers as wide a diversity of programs as any individual public-serving private institution. Of the individual Colleges compared in the table, the University of Hartford has the most diverse offerings--largely because of its administrative structure.

As to future diversity in degree and certificate programs, two policy questions will require further study by the Board. The first is the possible impact the development of two-year community colleges may have on the State College system, and whether or not the Associate Degree programs should not be transferred to those institutions. This would have the effect of enabling the State Colleges to concentrate their human, financial, and physical resources in another direction.

The second question is the matter of advanced degrees--at the Master's level and beyond. It would seem to be in the best interests of the State Colleges and public higher education as a whole for the Colleges to extend existing and new-found academic strengths upward to, and in some cases beyond, the Doctorate level. This would be advantageous in attracting faculty, gaining private support for special areas, and raising the general tenor and quality of certain departments. Some advanced degrees might be awarded by the Colleges themselves, others might be bestowed under the auspices of the University of Connecticut or a private institution with degree-granting powers. A precedent for such cooperation is the awarding of diplomas by the University of Connecticut for the sixth year cooperative program offered at Central Connecticut, Southern Connecticut, and Danbury State Colleges.

The move upwards would be progressive, undertaken only after full accounting had been made of the College's abilities and in full demonstration of the benefits this would have to the system. As a first step, panels of academic assessors--knowledgeable people outside the system--may be convened to evaluate departments and programs which do have sufficient reason for considering advanced programs. The panels of academic assessors might also suggest how the above opportunities might best be met.

Curriculum and Course Offerings in Full-time Day Programs

Table A-4 lists the departments in the four State Colleges and the six public-serving private institutions. Table A-5 lists the number of courses listed by subject heading. Table A-6 lists courses summarized in order of descending coverage. The tables do not reflect fine grain distinctions between various subject areas, and there are minor redundancies in the listings. They are intended to give a general view of departments and course offerings. They do indicate the overall pattern of present coverage in the State Colleges and suggest areas which might eventually be represented in future curriculum.

In general, the designation department suggests that a college has appointed sufficient faculty and commanded resources to offer a suitable range of courses in a special discipline or subject area.

As can be expected in this stage of their development, the State Colleges have strong departments in subject areas in teacher preparation and are on the threshold of departmental strength in some of the traditional liberal arts and sciences.

In the main, however, the State College system, as a whole, does not yet have a comprehensive college curriculum or course offerings in the liberal arts and sciences, nor are they well represented in applied disciplines such as business administration, public administration, and professional course work at the Bachelor's level such as social work, journalism, and other similar fields.

The Future

The major educational enterprise in the State Colleges, since the early years, has been teacher education. As shown in Table A-6, not all the State Colleges give equal coverage. It is expected that a significant portion of future growth will encompass enlargement in size and quality of courses and departments in teacher preparation. In addition, a comprehensive college curriculum is anticipated so that the Colleges may fulfill their obligation of offering as wide a range of educational experiences as may be presented in any college of excellence.

Because of the relatively small size of the total college population expected in the State Colleges, not all units the system need cover all curriculum. Accordingly, a long-range plan could anticipate that certain Colleges in the system may develop academic specialities unique to their own institution. These may not be present in equal strength in the other Colleges. To help implement this policy, but within the limits of institutional autonomy, all Colleges in the system may offer a lower division curriculum. This would afford easy transfer and pursuit of upper division courses in special subject areas for those students whose academic programs cannot be served on the campuses in which they have originally enrolled. Students occasionally have to settle on a second-choice preference program because the quota for the first-choice program has been filled, as pointed out in Report on Higher Education.

The general intention of this policy on enlargement of curriculum may also be achieved in other ways, such as joint appointments of faculty by two or more Colleges in the system, exchange of faculty to service courses for which there is not constant demand, cross-registration privileges between public and private institutions.

These measures are particularly appropriate for Connecticut. There is an evident clustering of many different kinds of institutions in the State's urbanized regions. With the completion of the known 1980 Highway System, inter-regional and intra-regional accessibility should be considerably improved. Unusual opportunities for exchange programs could materialize.

Obviously, the details of such proposals will need to evolve from continued discussions and cooperative efforts among the Colleges that comprise the system. The general intention is quite clear: the system as a whole could provide a full range of academic programs whereas the individual Colleges cannot. In those instances when the system cannot offer the programs within its own resources, agreements could be established to use facilities and programs of other institutions which may be willing to participate in cooperative arrangements. Again, a similar precedent is evident at the Southern Connecticut State College Library where graduate students may use the Yale University Library.

Possible Programs

We believe the priorities for academic development can be ranked as follows:

1. The strengthening, enlargement, and improvement of teacher preparation.
2. The full-scale development of a liberal arts and sciences curriculum, especially languages, mathematics, social sciences, behavioral sciences, natural and physical sciences.
3. Introduction of professional courses appropriate to the degree-granting capabilities of the Colleges.

These courses reflect the needs of the State as a whole, and the following factors. (The substance of these remarks on population, growth, urbanization, and other general conditions are further documented in Appendix B.)

1. Connecticut has been experiencing (and will continue to experience) significant growth in population.
2. Largest growth is occuring along the Stamford-Bridgeport-New Haven-New Britain-Hartford axis.
3. This growth is in the form of overlapping urbanized areas, creating a mega-city.
4. The State will continue to depend on manufacturing and industrial development for a significant part of its economic base in this area. Service employment will grow accordingly.
5. Relative increases in lower income families and non-white populations can be expected.

6. Per capita income will rise; not all population groups will equally share in the rise.

Accordingly, a major part of the Connecticut population will be living in highly urbanized areas with all the concomitant problems and opportunities that such a style of life affords.

In addition to the absolute general requirement to have a well-educated citizenry to maintain social stability, economic survival, and growth in an urban state, the State Colleges should give full response to the need for trained people in these fields: public service (education, social workers, public administration, urban affairs, medical technology), private enterprise (industrial management, computer technology, business administration, communications and transportation), leisure time activities (the performing arts, fine arts, recreation and related programs), national and international affairs (non-Western languages and studies, regional development, and related economic development programs).

Obviously, these listings overlap one another in theory and practice. They do, however, shed light on the basic factors out of which the new curriculum and future academic programs must surely come.

There are other educational experiences which are pertinent to the above descriptions of the future. The system as a whole should be in the position of providing selected students with the opportunities for co-operative education in which alternative semesters are spent on campus and on a job.

The system should afford some students a foreign experience, in a formal educational setting abroad, or in carrying out some task or assignment that enlarges his view and understanding of the world. These activities seem particularly pertinent to a student body which will take on more homogeneous characteristics in the decades ahead.

The system as a whole should make room for a truly experimental educational experience--probably within a more traditional college setting. It is not possible to identify at this time what kind of innovation and experiment is called for. The idea is mentioned here as our recognition that such experimentation is another aspect of the quest for quality, and in turn could be part of the Colleges' aspiration.

Special Programs, Evening, and Summer Programs

Table A-8 lists most of the special programs that the State Colleges have carried on in the last year. Most of these have been largely in the field of teacher preparation. They give evidence of the Colleges' interest and abilities to respond to demand with resources tailored to special conditions and requirements. A continuation of such a response is expected in the years ahead. Clinics, workshops, and seminars are part of the richer educational environment that the Board should seek for the system.

Evening and summer programs are also part of the legitimate academic enterprise. The evening offerings now are as varied as those during the day, and the State Colleges hold their own with the public-serving private colleges in those subjects and fields in which they have daytime competence.

The further enlargement of the evening programs will depend on several factors not yet possible to evaluate: first, the impact of the Community Colleges and, second, the question of whether or not detrimental economic effects may be felt by public-serving private colleges if the State Colleges offer equivalent educational opportunities at a cost to the student lower than the other institutions. Third, would the enlargement of the evening programs dilute energies and resources needed to advance the daytime programs?

These are policy questions which the Board should study further. The summer programs must similarly be reviewed. The Board might examine national experience as to the efficacy of year-round operation and its possible advantages in optimizing physical plants and human resources. In this respect, policy positions on the summer school would probably be held in abeyance until such study is completed.

Faculty

In most institutions the faculties of the colleges are the prime agents for determining the structure, content, and quality of academic and research programs. Because of the nature of tenure appointments and academic freedom, the quality of the colleges is intimately affected by faculty appointments.

Total State College faculty now numbers over 800 professionals. This group may be enlarged at least threefold by 1975. It is self-evident that this growth will set the temper and tone of the system for several decades to come.

Faculty recruitment thus represents unique opportunities for strengthening existing educational programs, for expansion of the old, and for starting new endeavors.

Given the probability that the system must compete for a scarce human resource, all appropriate measures should be taken to hold the existing professional staffs, recruit new additions, and use both to optimum advantage. To do so effectively, the present situation needs system-wide review in order to articulate the future need and support the individual College's abilities to fill its professional ranks.

Other measures that deserve study are faculty exchange programs among the Colleges in the system as well as with other institutions, joint appointments, the utilization of machine-assisted teaching, the pros and cons of independent learning, and other innovations and methods that study might reveal as advantageous to the coming needs.

The Student Body

From our viewing point as physical planners we note three fundamental long-range issues that relate to the student body:

1. The Colleges should consider having a representative student body.
2. Those qualified for admittance should be encouraged to graduate, i.e. counseling programs should be enlarged.
3. The system as a whole should aim to present to the students as wide a range of academic programs and educational experiences as may be encountered in any single collegiate institution in contemporary American higher education.

The Board should consider having a representative cross-section of students in all its Colleges, in abilities, origin, sex, and academic interests, because a single stratum of Connecticut youth in a single college environment is parochial, undemocratic, condescending, and self-defeating.

Students who represent the present range of college entrance scores and qualifications would, of course, continue to be admitted, but some gifted students and those whose predicted performances may be somewhat marginal should also be actively recruited.

As a corollary action, educational programs should be developed, faculty gathered, and facilities constructed that will sustain the above policies. The Colleges are now moving in that direction. Continued and enlarged support is called for.

Although it is probable that the costs for such programs may require higher per capita budgets, we nonetheless believe that such costs may be insignificant when compared to the personal and institutional wastefulness and frustration that comes from high attrition.

This policy should not be construed as a suggestion that a Bachelor's degree is a birthright to be granted after four years in attendance. It does emphasize, however, that all possible means will be applied to enable a student to meet the opportunities presented and available when he decides to apply for admittance to a State College and he in turn is accepted for matriculation.

As one step in implementing this program, we recommend the establishment of an Institution Research Office (IRO) to serve the State Colleges and coordinate, when appropriate, their individual research activities.

IRO could be the center of continuing investigation into a number of areas relevant to the Board's long-range plan. Initially, however, it may be concerned with these matters:

1. Identification of what would constitute a representative cross-section of students in the State College system.
2. Identification of means and techniques for enrolling a representative cross-section, including methods for informing and coordinating the efforts of local high school counselors.
3. Identification of causes of attrition in the entering classes at the State Colleges.
4. Identification of programs and procedures that would reduce the attrition rate.

IRO would supplement and assist, but not supplant, the individual Colleges in their own special institutional research activities. Its main responsibility would be directed towards studies which may have a system-wide application and usefulness.

The following examples suggest areas which may be covered by the individual Colleges and IRO during the next few years--studies carried on elsewhere which have successfully supported attempts to raise the quality of the institutions involved.

1. Studies related to students that resulted in a modification of admission requirements, improvements in student counseling, improvement of freshman orientation, and the raising of academic standards.
2. Studies related to faculty led to improved conditions of faculty service such as the introduction of sabbatical leaves, better salaries, better retirement provisions, the addition of insurance, and adjustment of teaching loads.
3. Administrative studies leading to reorganization of the administration; improvements in budgeting procedures; improved control of class size, teaching loads, faculty promotion practices, and instructional costs; and improved quality of programs. At the same time significant savings were effected.
4. Curriculum studies resulted in remedial courses being dropped or changed, honors programs being strengthened, ineffective courses being identified and eliminated, and modern language requirements being revised.
5. Preliminary studies of plant and facilities resulted in comprehensive planning and utilization studies as a consequence of which building plans were markedly modified and class schedules were changed.

In accomplishing such work, we strongly urge that it be done within the context of free, open, and constructive communication among all concerned. Dispassionate and objective accounting of the best ends and the best means can only result in a stronger system and better Colleges.

Retrospection, knowledge, evaluation and comprehensive planning, are the first steps in accruing the necessary internal and external support for the common goals all colleges serve and the special goals each has the opportunity to attain.

Institutional research is an effective, objective, and proven technique for gathering data and identifying policy alternatives for decision-makers. It is a fundamental requisite in developing strong academic institutions.

We believe that such research will be useful in continuing planning of new programs and patterns of operation, in managing institutional resources, and in evaluating the quality of instruction, research, and services that the individual Colleges and the system as a whole offer to the State.

All the State Colleges would share in formulating IRO's programs; all will participate in the studies and evaluations made therein; all will receive the benefits.

Research

Research has always been an important part of the collegiate environment. It has flourished therein because colleges do provide the necessary stimulation and ideal conditions for people to come together and exchange ideas and techniques. Research is the stepping stone for the production of scholars and scientists and the device by which faculty may, in part, be measured for advancement through the academic ranks. In the State College system, research should continue to be part of the fundamental triad of educational purpose: the gathering, preservation, and dissemination of facts and values.

With the necessary proviso below kept in mind, the system and the Colleges should encourage several kinds of research. First, and perhaps foremost, is that research which is undertaken by individuals solely for the pursuit of knowledge for its own sake. Continuing attention should be given to create opportunities for faculty and selected students to fulfill their desires and abilities to do so. Efforts should be made to fund independent research from within the system and from external financial resources. A good library, adequate and comfortable faculty offices, and other physical resources must be provided to meet these objectives. Contract and sponsored research should be supported to the extent that it is relevant to the College's teaching programs and/or serves a demonstrated community need. We believe that warning signs are up across the country about the hidden costs of carrying on research activities without proper financial and management controls by the institution. Any efforts detrimental to the institution's teaching programs are to be avoided.

Contract and sponsored research should be launched only after a suitable study of costs and benefits has been made and due regard has been taken of the continuing obligations that are assumed when fiscal resources are invested in physical plant and initial operating budgets.

To sharpen this policy and give overall direction to the College's desires, it is suggested that a system-wide coordinating committee on research be established to accomplish these immediate objectives:

1. Identify in detail the present research activities at the Colleges.
2. Identify the relationships these have to the Colleges' education programs.
3. Identify the physical facilities involved.

4. Identify the costs connected with these programs.
5. Identify other research areas that might be covered.
6. Identify the manpower, physical facilities, and financial resources needed to launch and continue such programs.
7. Identify possible sources of support.
8. Identify actions to be taken to eliminate or modify unnecessary research activities, to strengthen existing programs, and to start new enterprises.

It is acknowledged that research has an important place in the Colleges and that enlarged programs are desirable. The above study should help establish priorities for future action. Until such a study is completed, policies must remain at the level of generalities and each request for support treated as an ad hoc measure. As the facilities and Colleges grow and competition for resources inevitably follows, an articulated overall policy on research is desirable.

Libraries

Changes in the patterns of higher education, increasing emphasis on independent study, and a proliferation of published materials and other items used in library work, have substantially increased the importance of the college library.

Table A-9a describes the present libraries at the four Colleges. The figures indicate serious efforts to increase the number of volumes. The total volumes held in the State College system, however, are still below minimum standards, as shown in the statistics on volumes per student in Table A-9b.

The American Library Association's minimum standards for college and university libraries averages approximately

60 volumes per student at the enrollment levels which the four Colleges have now reached.

Equally serious is the lack of space assigned for readers and collections in the four college libraries. For example, using very minimal space standards, Central Connecticut State College should have 45,000 square feet of additional space for its library collection, operations and present student enrollment. Other colleges are in similar positions.

The lack of space and shortage of books has been recognized and all Colleges are presently planning to improve their facilities. With the possible development of two new campuses, there is now opportunity to share recent experiences and involve library staffs at all the Colleges in the planning and programming of facilities. Accordingly, before major changes are undertaken in the present library construction plans, a system-wide examination of library standards and planning procedures for the State Colleges is warranted.

First, priority should be given to building adequate core collections at the four Colleges. Consideration should continue to be given to the use of data processing techniques and emerging library technologies for processes that may be centralized, such as a union list and other cooperative programs which may optimize the Colleges' combined library resources. Given the proximity of the campuses to each other, no book is more than four hours away.

To undertake the necessary upgrading of existing libraries and to plan for the future, the system as a whole might engage a library research director who could coordinate and direct the above activities and serve as technical support for the individual college libraries.

Alternatively, inasmuch as Southern Connecticut State College has a Department of Library Science, counsel and advice may be drawn from people within the system. We believe that since the major commitments in funds for the libraries of the future have not yet been made, immediate action on the above recommendations has high priority.

Housing

The provision for housing for students at the four State Colleges has reached the crisis stage; and in light of the presently proposed construction programs and anticipated enrollments, little relief is in sight.

Table A-10 shows the existing housing situation in the fall of 1966. Several matters are worth noting about the system-wide picture. For the 11,101 full-time day students, the Colleges can house only 2,236 students, or 20 per cent of the student body. Housing for men is particularly in short supply, less than nine per cent being accommodated on campus.

Twenty-nine per cent of the student body is accommodated off-campus, in approved housing (3,252 people). At least 5,788 applications for campus housing were filed, or the equivalent of half the campus population. Many students accepted for entrance were forced to withdraw because campus accommodations were not available. The demand for campus housing is probably at least two and a half times the existing on-campus housing resources.

The community around the campus is carrying the burden of campus housing; and although a definitive study has not been made, it is unlikely that they can continue to house a constant percentage of the coming enrollments. In the instance of Danbury and Willimantic, the available housing for students may be limited.

Another system-wide factor that affects future housing policies is that off-campus housing tends to be twice as costly to the student as on-campus housing. With few prospects for new construction at reasonable cost in the future and with the probability of increased taxes at the local level and continuing demand, off-campus housing costs to the student are likely to rise.

The situation varies at the individual Colleges--Willimantic has the largest percentage of students housed on campus; Southern, the least. Central has the largest percentage of students living in approved off-campus facilities; Danbury, the least. At Central, one out of three students lives off campus in approved housing.

At all colleges, applications for campus housing exceed the number of available units by a large ratio, with Southern having over 3,000 applications for 610 places.

Housing pressures have also resulted in overcrowding in the College dormitories. The existing facilities, constructed to accommodate 1,951 students, now house 2,246 people.

Approximately 1,700 new units are now under construction or in an advanced design stage. Funds for about an equal number have been committed. These will meet the needs of short-range projected enrollments but not cut into the existing shortage. With the largest growth in student population anticipated around 1970, an accelerated program of housing construction is called for.

The details of this program, expecially the number of units to be constructed on each campus, must await decisions on whether or not new campuses will be developed.

Future Housing Needs

With the exception of a few municipal colleges, there are no institutions of academic distinction that do not have a large proportion of students in residence.

Educationally, we believe that there are unique advantages to on-campus living. Students residing in a collegiate environment have opportunities for extra-educational programs, extracurricular activities, increased chances of contact and communication among their peers and visitors to the campus, and optimum access to college facilities such as the libraries, laboratories, and other physical resources. With the prospects for new teaching technologies to be introduced, housing may become as important a place for instruction as the classroom.

On-campus housing can sustain the enrollment of a representative student body. It can serve as a threshold to maturity, independent judgement, and the development of value systems appropriate to the student's growing vision of himself and the world around him.

To be effective, housing of this type must be more than just shelter. It has to be planned, designed, and constructed with firm knowledge of the educational purposes it is to serve.

Not all of the housing constructed by the State Colleges to date will stand the test of educational suitability.

Future housing should be developed with the following purposes in mind:

1. No student should be denied the advantages of a residential education because campus housing is not available.
2. The State Colleges should devise ways and means to accommodate those students who desire a residential education but whose family and personal circumstances make it impossible for them to have this unique educational experience.

3. There are signs that the present student generation, and probably those to follow will continue to exercise their preferences for kinds of housing not yet available in the present stock of facilities. These include cooperative apartments, mixing of male and female students on the same site (if not in the same building), and other housing types that come closer to the world the student will experience when he graduates. To the extent possible, the Colleges should provide a diversified housing pattern.

4. Accommodations for graduate students and married students are now inadequate. As required, the State Colleges should develop facilities to meet these needs. This policy recognizes that the increase in enrollments, changing undergraduate-graduate mix, and demographic trends towards early marriages may quantitatively require a significant response to this housing group.

5. A significant number of students may choose to live in the environs of the campus, rather than in College facilities. This can have dramatic impact on the urban areas adjacent to the campus and on the physical environment of the locale. It is thus desirable for the Board to coordinate its growth with that of the community in which its Colleges are situated. Adequate measures should be taken to prevent urban blight, to preserve adjacent areas in sound condition, and to assist in renewal efforts when desirable. Obviously, any growth in the size of the State Colleges will have an effect on the adjacent communities. An administrative position on the College staffs should be established which will be concerned with town and gown relationships, and to reflect in its own planning continuing involvement in matters of community development.

6. The position of the commuting student on campus should be given attention equal to that of the student in residence. Programs and facilities should be developed to give such students equal access to the extra-educational opportunities available to the students in residence. The Colleges should give particular attention to this matter by a systematic examination of the problems of the commuting student, and the promulgation of guidelines and programs that may advance educational opportunities related thereto.

7. In anticipation that a sizable housing program lies ahead, the Board should establish a study committee to determine procedures and develop policies that might allow a systematic and economic approach to the development of housing for all the campuses. This committee should be concerned with establishing criteria and guidelines for State College use. In this way, useful experiences at one campus can be reflected in construction programs at the others.

8. Any new campuses should be developed in locations where easier commuting patterns can be achieved. As noted, compensating measures will be taken to provide extra-educational advantages to those students who live off campus and thus cannot obtain the special benefits of a residential education.

9. To meet the imminent crisis in housing, the State College system should immediately explore ways and means to accelerate its present housing schedule of construction. After review and discussion with the Colleges, new priorities and programs should be established for immediate consideration of the present Legislature.

Present Construction Programs

Table A-11 lists the present construction programs at each of the Colleges. There are 23 major projects, with a dollar value of $36 million, in various stages of planning, design, and construction. All programs are due for completion by late 1969.

Although the Colleges have made initial studies of needs beyond 1968, no detailed capital construction programming is available for the end of the decade and the 1970-75 period. In anticipation that increased enrollments will require a continuing investment in physical plant, it is recommended that the system as a whole prepare a comprehensive capital construction budget for the next 10 years.

This budget need not represent the final recommendations on capital construction, but it will illuminate the long-range capital needs so that suitable preparations can be made for administering and carrying out the probably construction goals.

The 10-year forecast should be based on three considerations.

1. A study of how the Colleges presently use their facilities. This should be done for the system as a whole for the purposes of insuring optimum use of existing resources, identifying existing deficiencies in the physical plant, if any, and discovering space standards for future buildings that reflect the special conditions of the State College system.
2. A system-wide academic plan, which reflects a coordinated statement of the aspirations and long-range goals of the individual College.
3. Revised campus plans for each of the Colleges in light of possible new campus development in the system and possible 10-year enrollments beyond those now being planned for.

Resolution

This prospectus touches on some of the fundamental background issues which will affect the future temper and tone of the Connecticut State Colleges. In our discussions with people in Connecticut concerned about higher education, we have felt that many views expressed on these issues were tinged with a kind of desperation that suggested that eternal truths were being settled for all times and for all places.

We point out again that planning is a continuing process of review and change as new conditions and events emerge. The State Colleges may only reach a proper level of genuine distinction if their long-range plans garner widespread support. Whatever the resolution of the location and number of State Colleges, considerable effort will have to be made to get the necessary resources to carry out the plans and to attract students and faculty. In this respect, there should be full opportunity ahead for discussions of our recommendations, and reasonable regard given to opposing viewpoints.

The idea that reasonable men can enter into contructive dialogue about means and ends, strongly differ in opinions, yet reach constructive action, should not be misplaced. The State Colleges need substantial financial support to meet their present goals and objectives. The commitment to support these aims should be made this year. A consensus and agreement on how to do so is needed now--or far worse crises lie ahead if the Colleges are to expand qualitatively as well as quantitatively.

Richard P. Dober
for Dober, Walquist and Harris, Inc.
Cambridge, Massachusetts
28 February 1967

INSTITUTIONS OF HIGHER EDUCATION 1967

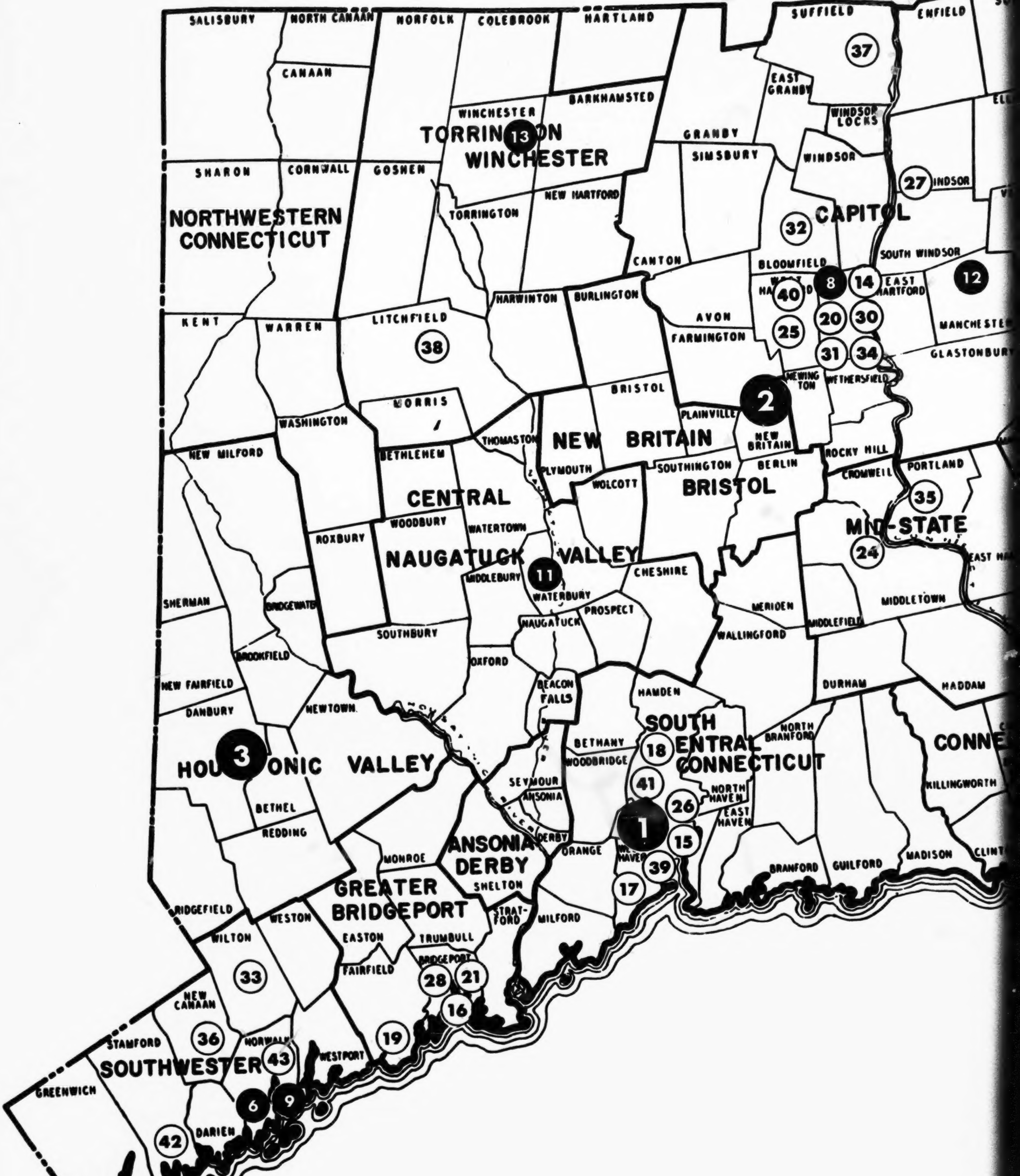
Code No.	Name	Location	Programs	Enrollment
	STATE COLLEGES			
1	Southern Connecticut State College	New Haven	IIIe	6481
2	Central Connecticut State College	New Britain	IIIe	5100
3	Danbury State College	Danbury	IIIe	2195
4	Willimantic State College	Willimantic	IIId	1440
	OTHER PUBLIC INSTITUTIONS			
5	University of Connecticut and Branches	Storrs	IVk	16419
6	Norwalk Community College	South Norwalk	Ic	1239
7	U.S. Coast Guard Academy	New London	IIg	687
8	Hartford State Technical Institute	Hartford	Ia	
9	Norwalk State Technical Institute	South Norwalk	Ia	
10	Thames Valley State Technical Institute	Norwich	Ia	5109
11	Waterbury State Technical Institute	Waterbury	Ia	
12	Manchester Community College	Manchester	Ic	447
13	Northwestern Connecticut Community College	Winsted	Ic	157
	PRIVATE INSTITIONS			
14	University of Hartford	Hartford	IIIk	8481
15	Yale University	New Haven	IVk	8385
16	University of Bridgeport	Bridgeport	IIIk	7930
17	New Haven College	West Haven	IIi	2673
18	Quinnipiac College	Hamden	IIc	2309
19	Fairfield University	Fairfield	IIIe	2294
20	Trinity College	Hartford	IIIb	1642
21	Sacred Heart University	Bridgeport	IIf	1583
22	Mitchell College	New London	Ic	1550
23	Connecticut College	New London	IIIb	1543
24	Wesleyan University	Middletown	IIIe	1455
25	St. Joseph College	West Hartford	IIIe	781
26	Albertus Magnus College	New Haven	IIe	602
27	Rensselaer Polytechnic Institute	E Windsor Hill	IIIg	601
28	Bridgeport Engineering Institute	Bridgeport	Ig, IIg	512
29	Annhurst College	Woodstock	IIe	360
30	Hartford College for Women	Hartford	Ic	199
31	Diocesan Sisters College	Hartford	IIe	175
32	St. Thomas Seminary	Bloomfield	Ib	165
33	College of Notre Dame of Wilton	Wilton	IIe	163
34	Hartford Seminary Foundation	Hartford	IVg	158
35	Holy Apostles Seminary	Cromwell	IIb	118
36	Silvermine College of Art	New Canaan	Ii	94
37	St. Alphonsus College	Suffield	IIb	90
38	Seat of Wisdom College	Litchfield	IIb	89
39	Berkeley Divinity School	New Haven	IIIg	86
40	Holy Family Seminary	West Hartford	Ib	63
41	Mount Sacred Heart College	Hamden	Ie	44
42	St. Basil's College	Stamford	IIb	34
43	St. Mary's Seminary	Norwalk	IIi	21

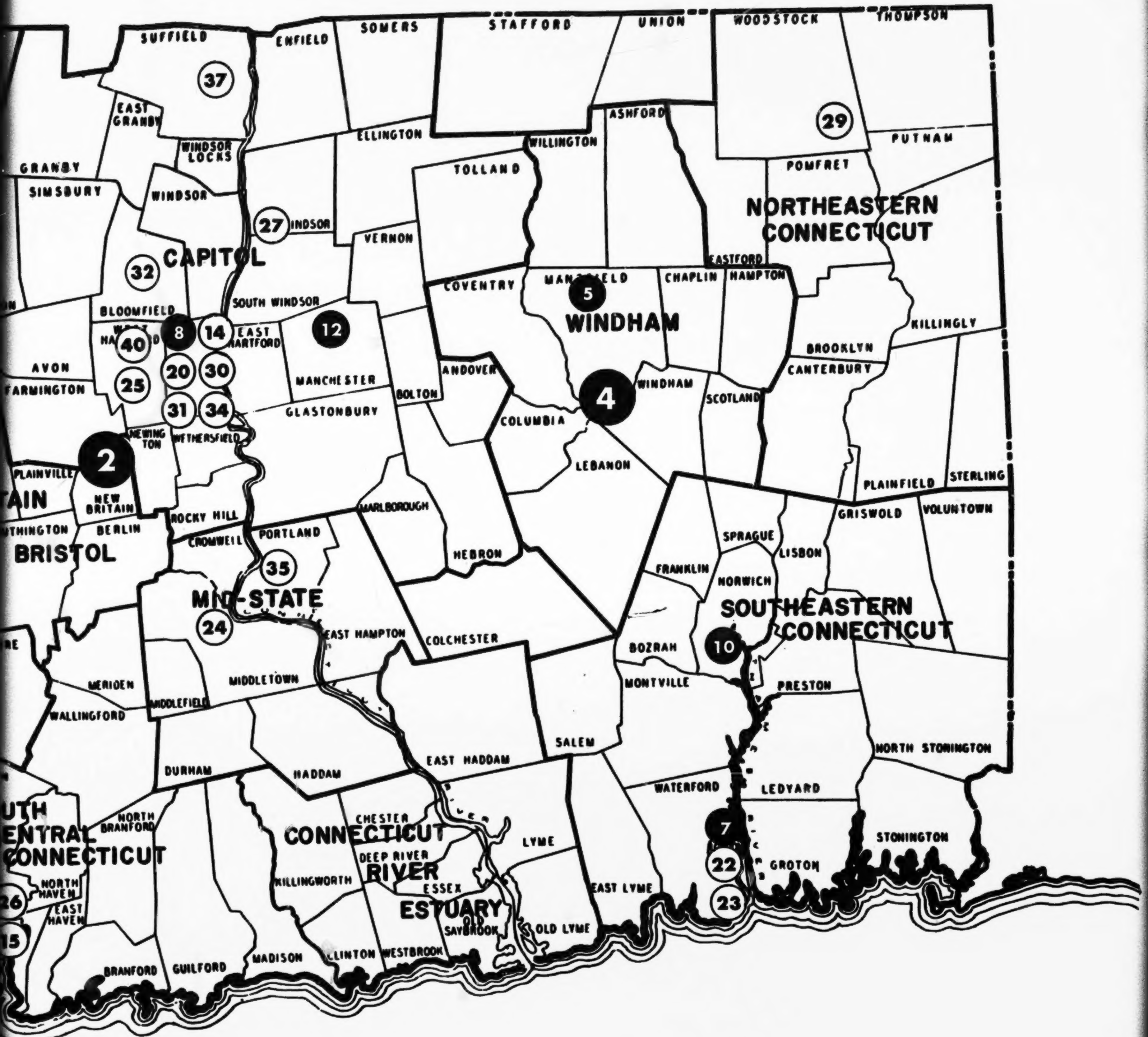
Type of Program:

- a. Terminal-occupational program, not intended to prepare for advanced study.
- b. Liberal arts program.
- c. Both liberal arts and terminal-occupational programs.
- d. Primarily teacher preparatory program.
- e. Both liberal arts and teacher preparatory programs.
- f. Liberal arts, teacher preparatory, and terminal-occupational.
- g. Professional or technical program (excluding teacher preparatory).
- i. Professional or technical and terminal-occupational programs.
- k. Liberal arts program with three or more professional schools.

Level:

- I Two- or three-year program of college-level studies.
- II Bachelor's Degree program or first professional degree program which entitles the graduate to enter the profession indicated.
- III Master's Degree program or program leading to a professional degree earned after the first professional degree in the same field.
- IV Program leading to the Doctor of Philosophy or equivalent degree.


SALISBURY
NORTH CANAAN
NORFOLK
COLEBROOK
HARTLAND
SUFFIELD
ENFIELD
37
CANAAN
EAST GRANBY
WINDSOR LOCKS
WINCHESTER
BARKHAMSTED
TORRINGTON WINCHESTER
13
GRANBY
SIMSBURY
WINDSOR
27
SHARON
CORNWALL
GOSHEN
NEW HARTFORD
TORRINGTON
NORTHWESTERN CONNECTICUT
CAPITOL
32
SOUTH WINDSOR
CANTON
BLOOMFIELD
8
14
EAST HARTFORD
12
40
20
30
MANCHESTER
25
31
34
GLASTONBURY
HARWINTON
BURLINGTON
AVON
FARMINGTON
KENT
WARREN
LITCHFIELD
38
NEWINGTON
WETHERSFIELD
BRISTOL
2
MORRIS
PLAINVILLE
WASHINGTON
THOMASTON
NEW BRITAIN
NEW BRITAIN
ROCKY HILL
NEW MILFORD
BETHLEHEM
PLYMOUTH
SOUTHINGTON
BERLIN
CROMWELL
PORTLAND
WOLCOTT
BRISTOL
35
CENTRAL
ROXBURY
WOODBURY
WATERTOWN
MID-STATE
24
NAUGATUCK VALLEY
11
MIDDLEBURY
CHESHIRE
SHERMAN
BRIDGEWATER
WATERBURY
PROSPECT
MERIDEN
MIDDLETOWN
NAUGATUCK
MIDDLEFIELD
SOUTHBURY
WALLINGFORD
BROOKFIELD
OXFORD
NEW FAIRFIELD
BEACON FALLS
DURHAM
HADDAM
HAMDEN
DANBURY
NEWTOWN
SOUTH CENTRAL CONNECTICUT
NORTH BRANFORD
CONNE
3
HOUSATONIC VALLEY
BETHANY
18
WOODBRIDGE
KILLINGWORTH
SEYMOUR
ANSONIA
41
NORTH HAVEN
BETHEL
26
EAST HAVEN
REDDING
DERBY
1
15
MONROE
ANSONIA DERBY
ORANGE
WEST HAVEN
39
BRANFORD
GUILFORD
MADISON
17
GREATER BRIDGEPORT
SHELTON
RIDGEFIELD
STRATFORD
MILFORD
WESTON
EASTON
TRUMBULL
WILTON
BRIDGEPORT
FAIRFIELD
28
21
33
NEW CANAAN
16
19
STAMFORD
36
NORWALK
WESTPORT
SOUTHWESTERN
43
GREENWICH
6
9
DARIEN
42


SUFFIELD
ENFIELD
SOMERS
STAFFORD
UNION
WOODSTOCK
THOMPSON
37
EAST GRANBY
WINDSOR LOCKS
ELLINGTON
ASHFORD
WILLINGTON
29
PUTNAM
GRANBY
TOLLAND
POMFRET
SIMSBURY
WINDSOR
NORTHEASTERN CONNECTICUT
27
INDSOR
VERNON
CAPITOL
32
COVENTRY
MANSFIELD
CHAPLIN
HAMPTON
EASTFORD
5
BLOOMFIELD
SOUTH WINDSOR
WINDHAM
8
14
12
EAST HARTFORD
KILLINGLY
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BROOKLYN
AVON
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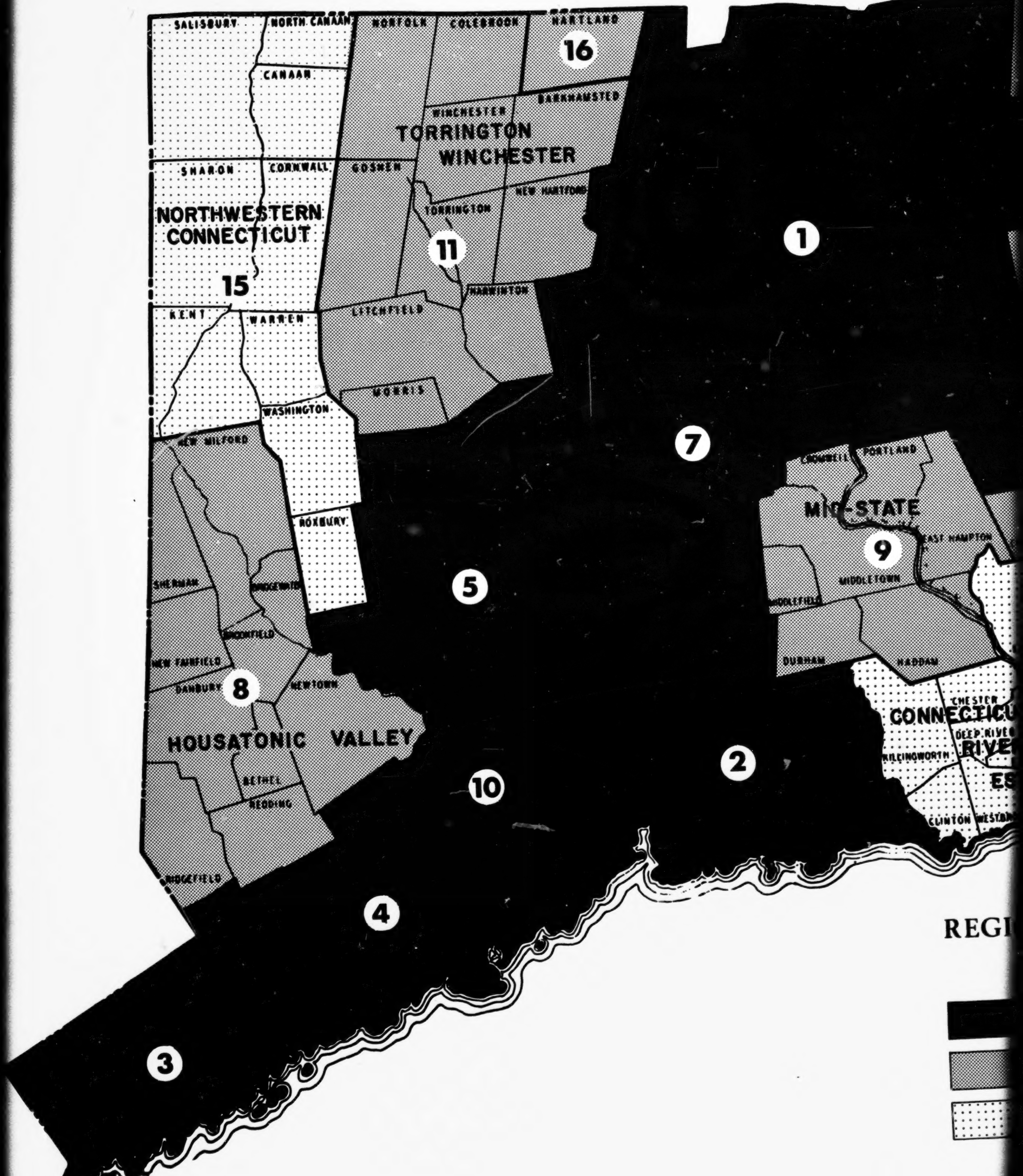
30
MANCHESTER
ANDOVER
CANTERBURY
25
4
WINDHAM
FARMINGTON
BOLTON
SCOTLAND
31
34
GLASTONBURY
COLUMBIA
NEWINGTON
WETHERSFIELD
2
LEBANON
PLAINVILLE
PLAINFIELD
STERLING
TAIN
NEW BRITAIN
ROCKY HILL
MARLBOROUGH
GRISWOLD
VOLUNTOWN
BERLIN
THINGTON
CROMWELL
PORTLAND
SPRAGUE
LISBON
BRISTOL
HEBRON
FRANKLIN
35
NORWICH
MID-STATE
SOUTHEASTERN CONNECTICUT
24
EAST HAMPTON
COLCHESTER
BOZRAH
10
MERIDEN
MIDDLETOWN
MONTVILLE
PRESTON
MIDDLEFIELD
WALLINGFORD
SALEM
EAST HADDAM
NORTH STONINGTON
DURHAM
HADDAM
WATERFORD
LEDYARD
UTH CENTRAL CONNECTICUT
NORTH BRANFORD
CHESTER
7
CONNECTICUT RIVER ESTUARY
LYME
STONINGTON
DEEP RIVER
22
GROTON
KILLINGWORTH
NORTH HAVEN
26
ESSEX
EAST LYME
23
EAST HAVEN
15
OLD SAYBROOK
OLD LYME
MADISON
CLINTON
WESTBROOK
BRANFORD
GUILFORD

REGIONAL GROWTH 1980

RANK ORDER 1980 POPULATION

	REGIONS	1960	1980
①	Capitol	546,545	811,071
②	South Central Connecticut	448,835	617,381
③	Southwestern	279,204	410,493
④	Greater Bridgeport	278,131	346,794
⑤	Central Naugatuck Valley	195,512	289,473
⑥	Southeastern Connecticut	174,412	267,376
⑦	Central Connecticut	186,667	256,143
⑧	Housatonic Valley	87,280	159,100
⑨	Midstate	62,746	118,581
⑩	Ansonia-Derby	60,241	82,181
⑪	Torrington-Winchester	59,648	80,917
⑫	Northeastern Connecticut	47,436	75,597
⑬	Windham	48,732	74,166
⑭	Connecticut River Estuary	30,370	61,890
⑮	Northwestern Connecticut	15,928	22,558
⑯	Non-region	13,547	20,728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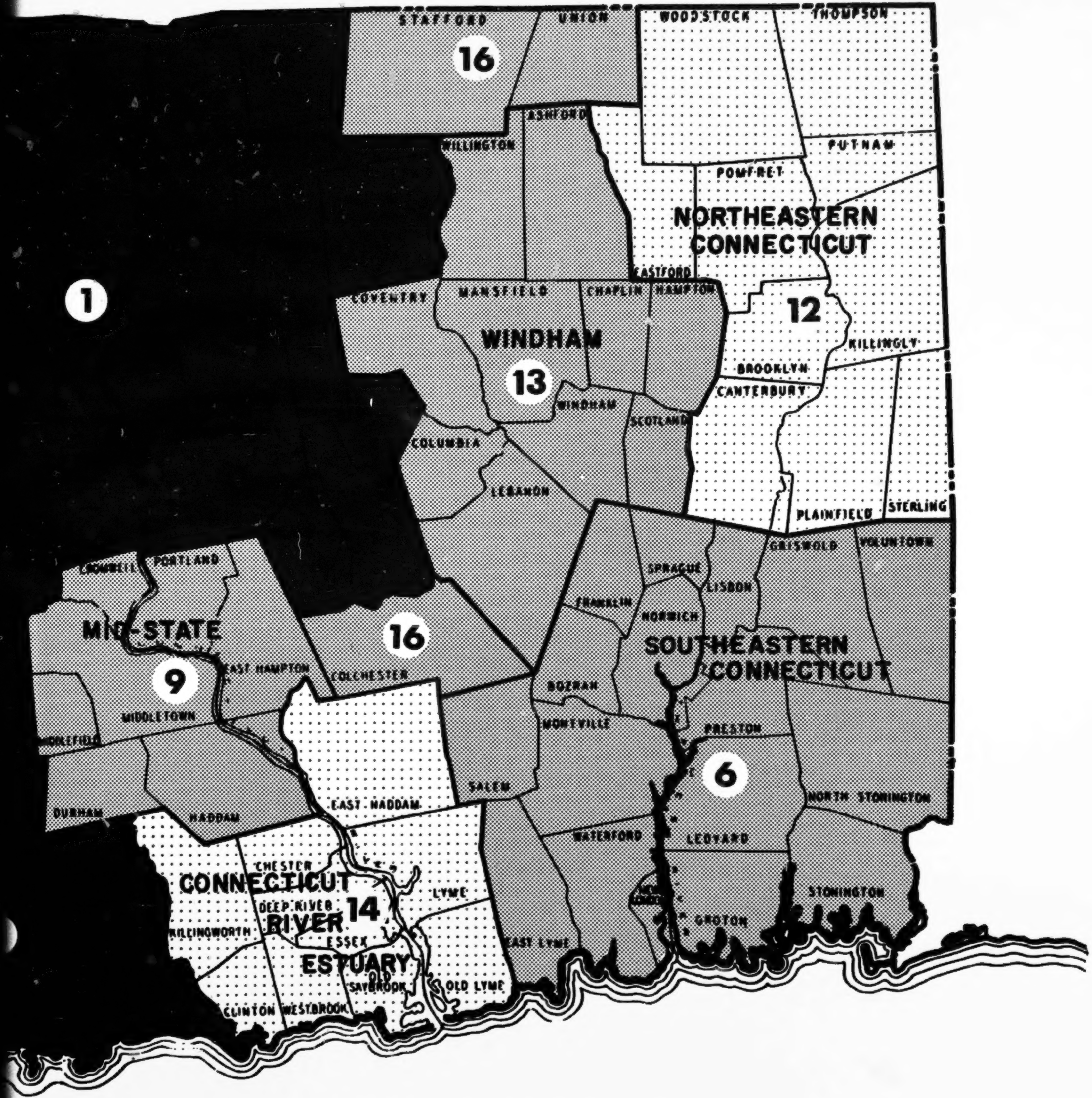
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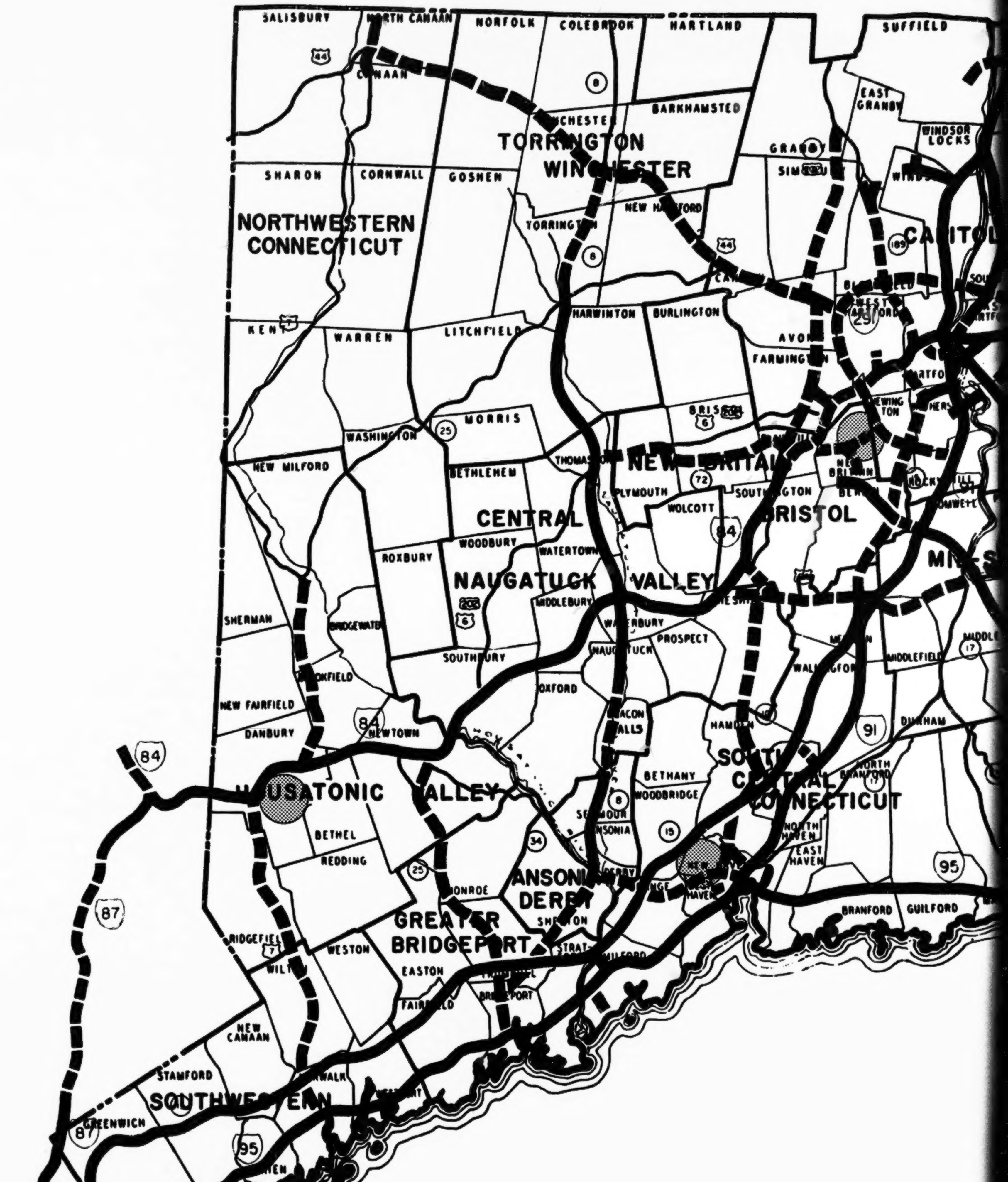
REGIONAL GROWTH 1980

■ URBAN REGIONS

▨ SEMI-URBAN REGIONS

⠿ RURAL REGIONS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SOUTHINGTON
WOLCOTT
CENTRAL
BRISTOL
WOODBURY
WATERTOWN
84
ROXBURY
NAUGATUCK
VALLEY
202
MIDDLEBURY
SHERMAN
BRIDGEWATER
WATERBURY
PROSPECT
SOUTHBURY
MIDDLEFIELD
17
NEW FAIRFIELD
OXFORD
DANBURY
NEWTOWN
BEACON FALLS
HAMDEN
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DURHAM
BETHANY
NORTH BRANFORD
HOUSATONIC
VALLEY
WOODBRIDGE
SOUTH CENTRAL CONNECTICUT
BETHEL
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NORTH HAVEN
REDDING
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ANSONIA
EAST HAVEN
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MONROE
DERBY
NEW HAVEN
BRANFORD
GUILFORD
GREATER BRIDGEPORT
SHELTON
RIDGEFIELD
7
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STRATFORD
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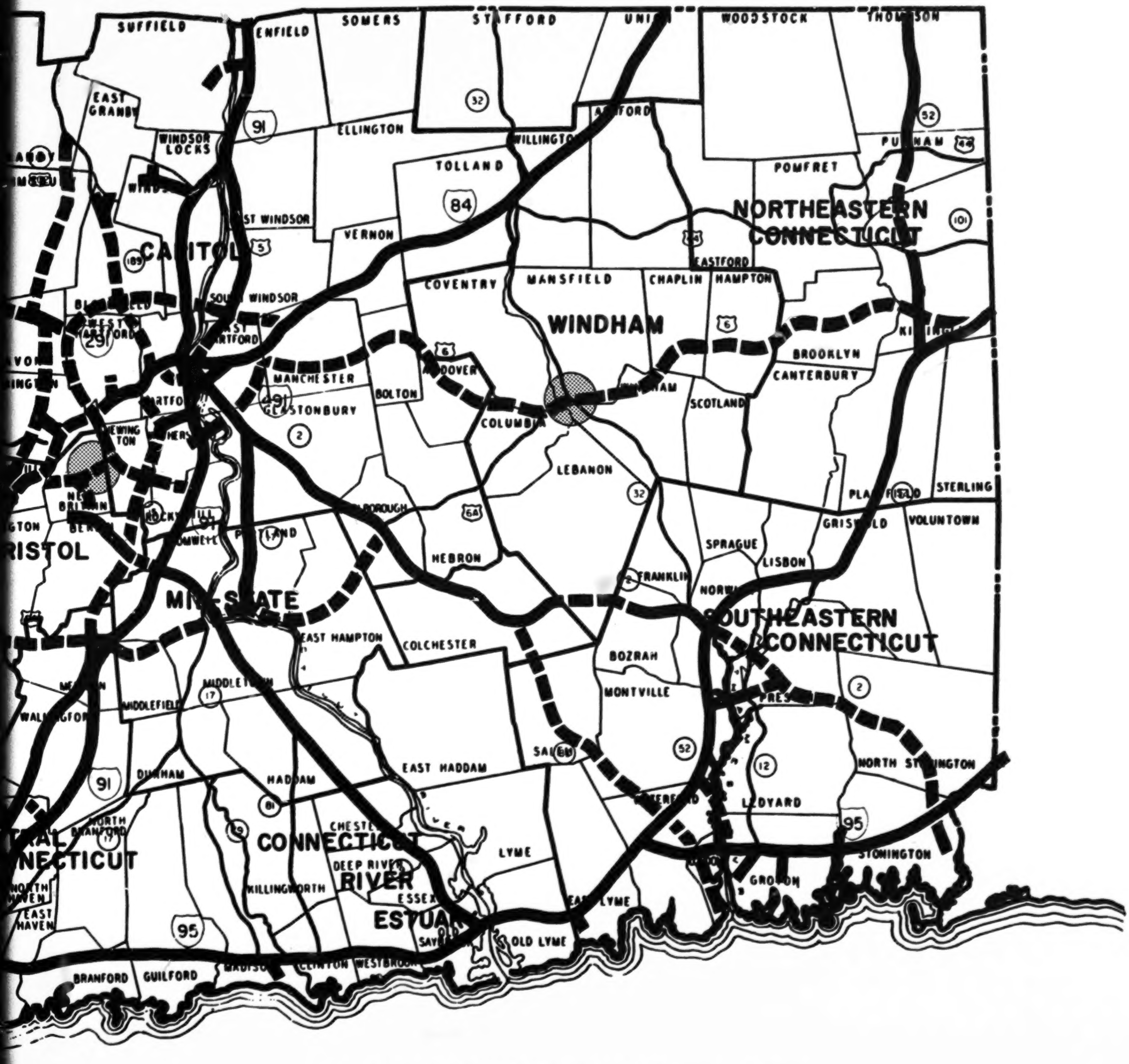
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GUILFORD
MADISON
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WESTBROOK
91
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52
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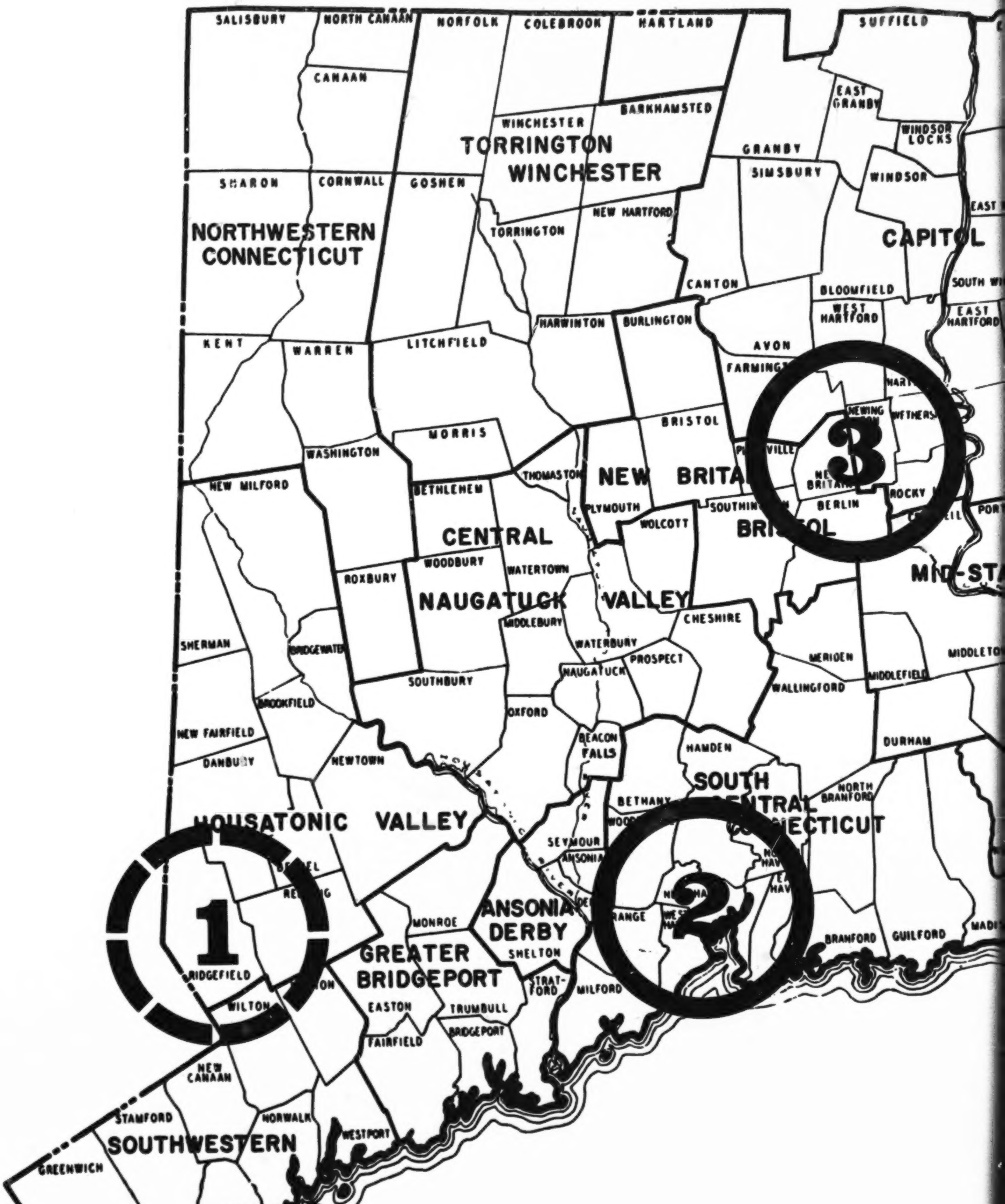
MAJOR EXPRESSWAYS BY 1980

▬ EXISTING 1964

▬ ▬ ▬ PROPOSED

● STATE COLLEGES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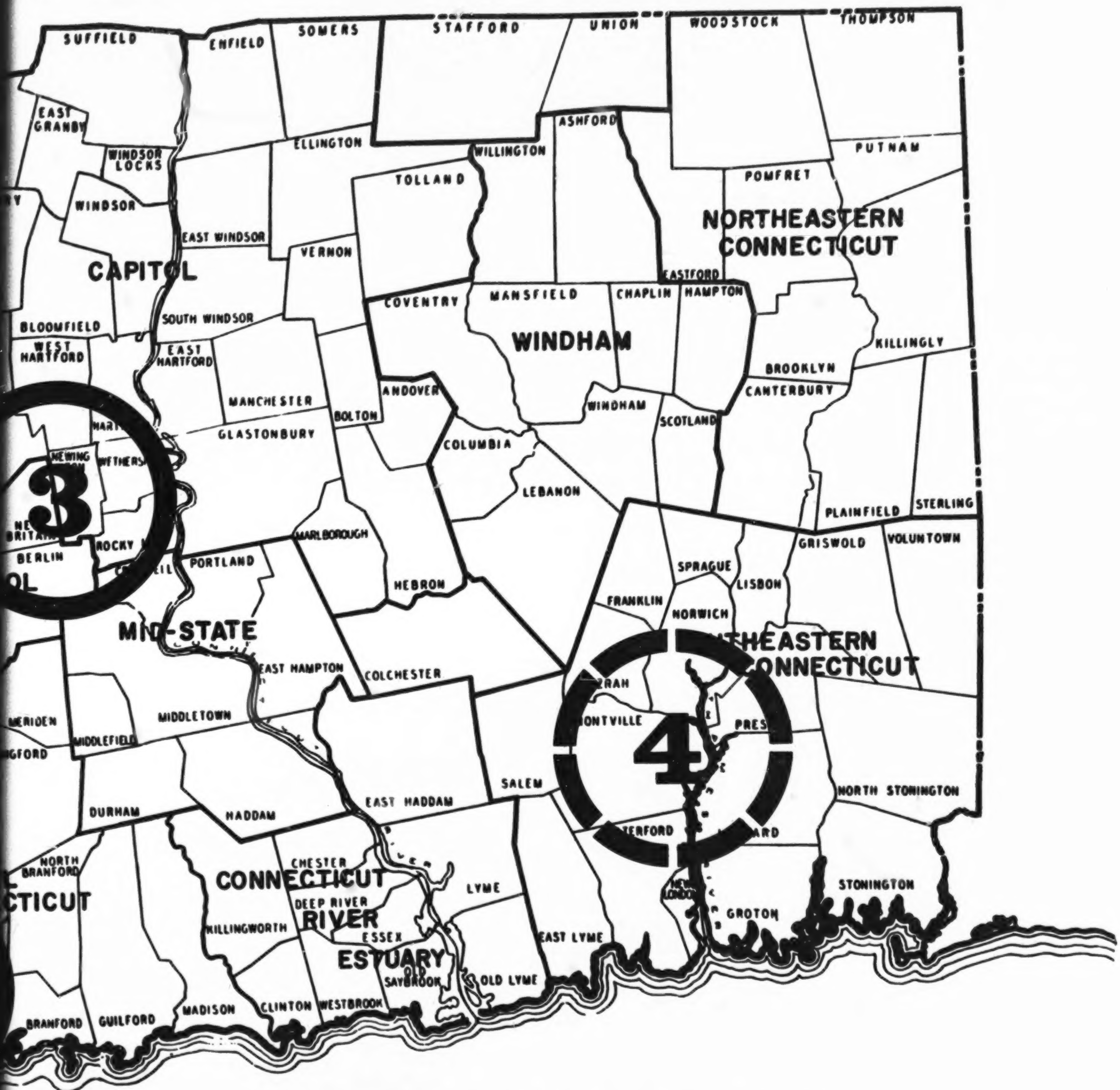
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GROTON
EAST LYME
OLD SAYBROOK
OLD LYME
BRANFORD
GUILFORD
MADISON
CLINTON
WESTBROOK

PROPOSED LONG-RANGE PLAN

1. NEW CAMPUS - DANBURY S.C.
2. SOUTHERN CONNECTICUT S.C.
3. CENTRAL CONNECTICUT S.C.
4. NEW CAMPUS - WILLIMANTIC S.C.

APPENDIX A

DATA ON EXISTING CONDITIONS AND PROSPECTUS FOR GROWTH

TABLE A-1 February, 1967

FALL 1966 ENROLLMENTS - STATE COLLEGES

	CENTRAL		DANBURY		SOUTHERN		WILLIMANTIC		TOTAL
	Undergraduate	Graduate	Undergraduate	Graduate	Undergraduate	Graduate	Undergraduate	Graduate	
Full Time*									
1. Day Enrollment	4,320	115	1,406	-	4,315	102	843	-	11,101
2. Evening Enrollment					155				155
Part Time*									
3. Enrollment	2,111	1,493	401	514	1,156	2,092	430	384	8,581
4. Full-time Equivalent (Est. at 30% of part time)	633	448	120	154	346	627	129	115	2,572
Total 1, 2 & 4	4,953	563	1,526	154	4,816	729	972	115	13,828
Full-time Equivalent	5,516		1,680		5,545		1,087		13,828

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*Includes students taking courses at College only. Does not include extension courses given elsewhere.

Source: October, 1966 Semi-annual Statistical Report of each State College.

TABLE A-2

BRIEF PROFILE OF THE CONNECTICUT STATE COLLEGES

Central Connecticut State College - New Britain

Founded in 1849 as a normal school.

In 1933 CCSC was given degree granting privileges and became the Teachers College of Connecticut.

In 1961 a four-year liberal arts curriculum was inaugurated.

President: Herbert D. Welte

Enrollment: Fall 1966

	Undergraduate	Graduate	Total
Full-time	4320	115	4435
Part-time	2393	1493	3886
			8321

Full-time professional staff:	
Day College	348
Evening & Extension	141
Part-time professional staff:	21
Operational staff:	190 1/2
Auxiliary Services:	4 professional, 46 non-professional (1965)

Programs: Academic Year, Evening College, Summer School, Extension Program

Tuition:	$100.00
Room & Board	$630.00
Misc. Fees	83.50

TABLE A-2 (continued)

BRIEF PROFILE OF THE CONNECTICUT STATE COLLEGES
Danbury State College - Danbury

Founded in 1903 as a normal school.

In 1956 a four-year liberal arts curriculum was inaugurated.

President: Ruth A. Haas

Enrollment: Fall 1966

	Undergraduate	Graduate	Total
Full-time	1406		1406
Part-time	401	514	915
			2321

Full-time professional staff:

Day College	133 1/2
Evening & Extension	3 1/4

Part-time professional staff: 15

Operational staff: 75

Auxiliary Services: 1 professional, 13 2/3 non-professional (1965)

Programs: Academic year, Summer School, Evening College, Extension Program

Tuition: $100.00

Room & Board	$630.00
Misc. fees	95.00

TABLE A-2 (continued)

BRIEF PROFILE OF THE CONNECTICUT STATE COLLEGES
Southern Connecticut State College - New Haven

Founded in 1893 as the New Haven Normal School

In 1937 became a four-year college with degree granting powers.

In 1956 a four-year liberal arts curriculum was inaugurated.

President: Hilton C. Buley

Enrollment: Fall 1966

	Undergraduate	Graduate	Total
Full-time	4470	102	4572
Part-time	1156	2092	3248
			7820

Full-time professional staff:

Day College	322
Evening & Extension	21
Part-time professional staff:	172
Operational staff:	150 1/2
Auxiliary Services:	3 professional, 33 1/2 non-professional (1965)

Programs: Academic year, Evening College, Summer School, Extension Program

Tuition: $100.00

Room & Board $630.00

Misc. fees: $107.00

TABLE A-2 (continued)

BRIEF PROFILE OF THE CONNECTICUT STATE COLLEGES
Willimantic State College - Willimantic

Founded in 1889 as a normal school.

In 1961 a four-year liberal arts curriculum was inaugurated.

President: Searle F. Charles

Enrollment: Fall 1966

	Undergraduate	Graduate	Total
Full-time	843		843
Part-time	430	345	775
			1618

Full-time professional staff:	
Day College	59 1/2
Laboratory School	28 1/2
Evening	1
Part-time Evening (Lecturers)	37
Operational staff:	55 1/2
Auxiliary Services:	0 professional, 3 7/12 non-professionals (1965)

Programs: Academic year, Summer School, Evening College, Extension Program

Tuition:	$100.00
Room & Board	$630.00
Misc. fees	75.00

TABLE A-3

(Table continued on next page)

CONNECTICUT STATE COLLEGES AND PUBLIC-SERVING PRIVATE INSTITUTIONS - DEGREES AND/OR CERTIFICATES NOW OFFERED (1966-1967)

	CCSC	SCSC	DSC	WSC	Univ. of B.	Univ. of H.	Mitchell	New Haven	Quinnipiac	Fairfield
Associate in Arts		x			x	x	x		x	
Associate in Science	x		x	x	x	x	x	x	x	
Bachelor of Arts	x	x	x	x	x	x			x	x
Bachelor of Science	x	x	x	x	x	x		x	x	x
Master of Arts						x				x
Master of Science	x	x	x	x	x					
Bachelor of Fine Arts						x				
Master of Fine Arts						x				
Master of Business Administration					x	x				
Master of Education						x				
Professional Diploma in Education	x	x	x		x	x				
Elementary Education Certificate	x	x	x	x	x	x			x	
Secondary Education Certificate	x	x	x	x	x	x				
Art Education Certificate		x								
Health and Physical Education Certificate		x								
School Librarian Certificate		x								
Certificate of Advanced Graduate Study						x				x
Medical Technology Certificate			x							

TABLE A-3 (continued)

	CCSC	SCSC	DSC	WSC	Univ. of B.	Univ. of H.	Mitchell	New Haven	Quinnipiac	Fairfield
Dental Hygiene Certificate					x					
Music Education Certificate			x		x					
Semi-professional Certificate					x					
Bachelor of Business Administration	x									x
Sixth Year Certificate in Education						x				
Educational Administration and Supervision Certificate						x				
Reading Certificate	x	x				x				
Bachelor of Music						x				
Bachelor of Music Education			x			x				
Master of Music						x				
Master of Music Education			x			x				

TABLE A-4 (Table continued on the next page)

DEPARTMENTS IN THE STATE COLLEGES OF CONNECTICUT AND
SIX PUBLIC-SERVING PRIVATE INSTITUTIONS (1966-1967)

Department	CCSC	SCSC	DSC	WSC	UB	UH	M	NH	Q	F
Art	x	x	x	x	x	x	x			x
Art Education					x	x				
Arts and Science								x		
Painting						x				
Sculpture						x				
Graphic Arts						x				
Advertising Design						x				
Accounting					x	x			x	x
Administration and Supervision					x	x				
Audio-visual Education		x	x		x	x				
Business	x				x					x
Biology	x	x	x		x	x			x	x
Business Administration							x	x	x	
Basic Studies									x	
Chemistry			x		x	x				x
Classics										x
Cytotechnology									x	
Drama	x	x			x	x				
Dental Hygiene Education					x					
Education	x	x	x	x	x	x				x
Health and Physical Education	x	x	x	x	x	x				
Elementary Education		x			x	x				
Secondary Education					x	x				
Foundations and Philosophy of Education						x				
Educational Measurements						x				
Education and Psychology						x				
Reading						x				
Guidance and Personnel Services		x	x		x	x				
Special Workshops and Independent Study		x				x				
Business Education					x					
Music Education			x			x				
Professional Education		x								x
In-service Education					x					
Vocational-Industrial Education					x					
English	x	x	x	x	x	x	x		x	x
Economics					x	x				x
Engineering		x			x			x		

TABLE A-4 (continued)

Department	CCSC	SCSC	DSC	WSC	UB	UH	M	NH	Q	F
Electrical Engineering					x	x				
Industrial Engineering					x	x				
Mechanical Engineering					x	x				
French					x					
Finance									x	
Government										x
History	x	x			x					x
Humanities										
Industrial Education	x									
Interdisciplinary Division			x							
Journalism					x					
Library Science		x								
Mathematics	x	x	x	x	x	x	x			x
Modern Language	x	x	x	x		x	x			x
Modern Language Education						x				
Music	x	x	x	x	x	x	x			
Marketing					x	x				
Medical Technology					x				x	
Management						x				
Nursing			x		x					
Psychology	x	x	x		x	x	x		x	x
Philosophy	x	x	x		x	x				x
Physics			x		x	x				x
Physical and Life Sciences	x						x			
Political Sciences					x	x				
Public Administration						x				
Social Sciences	x	x	x	x						
Social Studies							x			
Sociology					x	x				x
Speech	x	x			x	x				
Special Education		x								
Secretarial Studies					x		x		x	
Spanish					x					
Theology										x
Fashion Merchandising					x					
General Studies					x					
Industrial Design					x					
Industrial Relations					x					
Nutrition					x					
Recreation					x					
Science		x		x						

TABLE A-5

(Table continued on next pages)

NUMBER OF COURSES IN THE DAY PROGRAMS (GRADUATE AND UNDERGRADUATE)
AS LISTED BY SUBJECT HEADING IN THE 1966-1967 COLLEGE CATALOGS

SUBJECT	CCSC		SCSC		DSC	WSC		UB		UH		M	NH	Q	F	
	UG	G	UG	G	UG	UG	G	UG	G	UG	G	UG	UG	UG	UG	G
Art	44	18	27	17	8	10	1	39	2	39	3	3	9	5	4	
English	52	19	30	31	28	28	1	40	19	36	19	9	15	31	30	
Mathematics	43	29	21	11	15	15	1	25	16	24	9	11	22	17	20	
French	25	13	21	11	2	4		15	14	11	3	3	2	3	12	
Spanish	21	10	17	13	2	4		12		11	1	3	2	4	14	
Music	26	14	24	2	19	6	1	70	4	132	29	2	3	1	1	
Psychology	23	15	18	22	3	17	1	13	19	24	16	6	3	17	18	
Biology	29	13	24	15	15	23		19	7	20	12	6	3	8	15	
Chemistry	21	11	15	16	11	2		14	9	22	9	4	10	6	18	
Physics	22	4	17	3	14	6		14	14	13	7	4	7	4	20	
German	6		13	2	2			11		4	1	3	2	3	13	
History	45	27	26	18	32	32		22	23	24	4	1	5	26	36	
Science	13	17	14	9	5	2	1	4		7			4	31		
Health & Phys. Ed.	34	8	26	15	22	22		42	5		5	1	1			

TABLE A-5 (continued)

SUBJECT	CCSC		SCSC		DSC	WSC		UB		UH		M	NH	Q	F	
	UG	G	UG	G	UG	UG	G	UG	G	UG	G	UG	UG	UG	UG	G
Russian	6		5					4		4	1		1	1	5	
Philosophy	7	1	8	2				8	1	9	4		4	8	16	
Economics	21	1	13	8	2	3		22	10	10	10		8	10	13	
Sociology	14	5	22	11	11			24	13	16	9			8	15	
Education	33	39	70	56	21	4	9	22	78	22					7	77
Italian	6	10	8					2		3			0	1	4	
Speech & Drama	21	9	23	19	10	1		4	3	16	6					
Accounting	6							7		12	10		9	20	12	
Social Sciences	5	5			19	39	5				8	8	7			
Political Sciences	19	3	16	4	4	4		18	12	18	8			6		
Business								15	3					6	25	
Geography	19	8	12	9	2	1				35	2			2		
Business Admin.								3			3	6	22			
Marketing	9	3						21	4	7	9			17		
Secretarial Studies	11	1						16				7		16		
Latin								3							7	

TABLE A-5 (continued)

SUBJECT	CCSC		SCSC		DSC	WSC		UB		UH		M	NH	Q	F	
	UG	G	UG	G	UG	UG	G	UG	G	UG	G	UG	UG	UG	UG	G
Greek								2							8	
Interdis. Div.					4					2						
Nursing					13			14								
Audio-visual Ed.		2				3					4					
Anthropology	8	3	2	2	1	1										
Engineering													69			
General Studies								29	2					1		
Modern Language Ed.	7	10		1						1						
Journalism	1	1						11	4				4			
Admin. & Supervision	1									9	2			8		
Management	1									12	10			8		
Industrial Ed.	59	8														
Hebrew								2								
Library Science			7	27												
Safety Education	1	1	2	2												

TABLE A-5 (continued)

SUBJECT	CCSC		SCSC		DSC	WSC		UB		UH		M	NH	Q	F	
	UG	G	UG	G	UG	UG	G	UG	G	UG	G	UG	UG	UG	UG	G
Special Education		4	20	16							4					
Dental Hygiene								16								
Fashion Merchandising								10								
Industrial Design		9						12								
Industrial Relations	2							16	5		3					
Medical Technology								8								
Nutrition								5								
Recreation	3	1						5								
Vocational-industrial Education	21	5						12								
Elementary Education	5	6				6				5	9					
Secondary Education	6	2								3	8					
Foundations & Phil. of Education	3	1								2	6					
Educational Measurements	1	2								1	16					
Education & Psych.	9	13				1				1						

TABLE A-5 (continued)

SUBJECT	CCSC		SCSC		DSC	WSC		UB		UH		M	NH	Q	F	
	UG	G	UG	G	UG	UG	G	UG	G	UG	G	UG	UG	UG	UG	G
Reading	5	8								1	9					
Guidance & Personnel Services		3									11					
Public Administration										2	6					
Instrumental Music	4	3								12	9					
Metallurgy & Materials													9			
Orientation													2			
Social Administration													2			
Data Processing	1	2												2		
Finance	1									5	4			7		
Insurance	1													4		
Law	4	1												5		
Production Management											4			4		
Real Estate														3		
Government	6	3													13	

TABLE A-5 (continued)

SUBJECT	CCSC		SCSC		DSC	WSC		UB		UH		M	NH	Q	F	
	UG	G	UG	G	UG	UG	G	UG	G	UG	G	UG	UG	UG	UG	G
Theology															13	
Science Education	2	5		4		1										
Business Education	5	9														
Electrical Engineering										11	5					
Engineering Science										12	3					
Mechanical Engineering										13	1					

TABLE A-6 February 1967

COURSES IN CONNECTICUT STATE COLLEGES AND PUBLIC-SERVING PRIVATE COLLEGES (ARRANGED IN ORDER OF DESCENDING COVERAGE) DAY PROGRAMS

All Colleges
Art
English
Mathematics
French
Spanish
Music
Psychology
Biology
Chemistry
Physics

9 Colleges
German
History

8 Colleges
Science

7 Colleges
Health & Phys. Ed.
Russian
Philosophy
Economics
Sociology

6 Colleges
Education
Italian
Speech
Drama
Accounting

5 Colleges
Social Sciences
Political Sciences

4 Colleges
Business
Geography

3 Colleges
Business Administration
Marketing
Secretarial Studies

2 Colleges
Latin
Greek
Interdisciplinary Division
Nursing
Audio-visual Education
Anthropology
Engineering
General Studies
Modern Language Education
Journalism
Administration & Supervision
Management

1 College
Industrial Education
Hebrew
Library Science
Safety Education
Special Education
Dental Hygiene
Fashion Merchandising
Industrial Design
Industrial Relations
Medical Technology
Nutrition
Recreation
Vocational-industrial Education
Elementary Education
Secondary Education
Foundations & Philosophy of Ed.
Educational Measurement
Education & Psychology
Reading
Guidance & Personnel Services
Public Administration
Instrumental Music
Engineering
Metallurgy & Materials
Orientation
Social Administration
Data Processing
Finance
Insurance
Law
Production Management
Real Estate
Government
Theology

TABLE A-7 February 1967

TEACHER EDUCATION PROGRAMS OFFERED BY THE CONNECTICUT STATE COLLEGES (1966-1967)

	Willimantic	Southern	Danbury	Central
Elementary Education	x	x	x	x
Secondary Education				
English				x
Modern Foreign Language		x		x
Mathematics		x	x	x
Science		x	x	x
Social Science				x
Business				x
Industrial Arts				x
Music Education			x	
Art Education		x		
Library		x		
Special Education		x		
Physical Education		x		

February 1967

(Table continued on next pages)

TABLE A-8

SPECIAL PROGRAMS - CONNECTICUT STATE COLLEGES (1966-1967)

Central Connecticut State College

1. Sixth Year Cooperative Program with the University of Connecticut for the Professional Diploma in Education - This program is for graduate students with the Master's Degree, but who are not candidates for the Ph.D.

   The program is available in the following fields:

   Educational Administration
   Art Education
   Business Education
   Curriculum & Supervision
   Foundations of Education
   Elementary Curriculum
   Guidance & Counseling
   Industrial Education
   Junior High School
   Music Education
   Tests & Measurements
   Psychological Testing
   Reading
   Science Education
   Secondary Education
   Special Education
   Audio-visual Education

   The Diploma is granted by the University of Connecticut.

2. Intensive Program for College Graduates (available during academic year or summer session) - Prepares students for classroom teaching in elementary schools. Work done under this program may be applied toward the requirements for a Master's Degree.

3. Degree Program for Registered Nurses - Program leading to a Bachelor of Science Degree for qualified graduates of an accredited course in nursing. This is not a vocational program.

4. Reading Clinics - Part of the Summer School Program for Teachers.

5. Summer Theatre Workshops - A summer school laboratory course for in-service teachers, adults, and undergraduates.

6. Asian Institute - Part of the Summer School Program meant particularly for teachers interested in teaching about Asia.

7. Fine Arts Travel Course - Part of the Summer School Program - Travel in Northeastern States.

TABLE A-8 (continued)

Danbury State College

1. Danbury State College has a Music Education Department, the only one offered by the State Colleges in Connecticut.
2. Master's Degree Program for Elementary and Secondary Teachers - Five-year Program.
3. Cooperative Teacher Education Program - An extension program for Special Students held only in Darien.
4. Nursing Education
5. Laboratory Technology
6. In-service Education Program for Teachers-in-service.
7. Intensive Program for college teachers.

Willimantic State College

1. Degree Program for Nurses - For qualified graduates of a three-year nursing program with a R.N. Degree.
2. In-service Education Program - For Teachers-in-service leading to a Bachelor's Degree.
3. Limited Graduate Program - For students taking courses to be transferred to other colleges, for special in-service courses, and for other special reasons. No planned program is offered in this instance.
4. Intensive Program for College Graduates - For the Provisional Certificate for Elementary Teaching.
5. Bantam Lake Conservation Workshop - A graduate summer off-campus extension course.
6. Old Mystic Early Connecticut History Course - Graduate summer off-campus extension course.
7. Special Six-week Workshops -
    a. Children's Literature and the School Curriculum
    b. Elementary School Science Topics
    c. Advanced Modern Math

    These courses are offered in the summer.
8. Summer Art Workshop

TABLE A-8 (continued)

Southern Connecticut State College

1. Sixth Year Cooperative Program with the University of Connecticut for the Professional Diploma in Education - This Program is for graduate students with the Master's Degree, but who are not candidates for the Ph.D.

   The Program is available in the following fields:

   - Art Education
   - Audio-visual Education
   - Curriculum & Supervision
   - Elementary Curriculum
   - Foundations & Education
   - Guidance & Counseling
   - Health & Physical Education
   - Junior High School
   - Reading
   - Science Education
   - Secondary Education
     - English
     - Mathematics
     - Modern Languages
     - Science
     - Social Science
   - Special Education
   - Tests & Measurements
   - Psychological Testing

   The Diploma is granted by the University of Connecticut.

2. Special Education Program - Program in education of mentally retarded, neurologically impaired, physically handicapped, and emotionally disturbed children, leading to Bachelor of Science Degree and further graduate work.

3. Educational Television Courses - Study of the uses of educational television, both in closed-circuit and public information programs, and studio teaching.

4. Fifth Year Program for Permanent Teaching Certificate.

5. Intensive Program for Certification of College Graduates (I.P.C.G.) - This is a full-time program during the Summer Session and a part-time program during the academic year. Work done under this program can be applied toward the requirements for a Master's Degree.

6. Library Science Division (Undergraduate and Graduate Program) - There are 7 undergraduate courses, 22 graduate courses, and 6 non-credit extension courses offered in various parts of Connecticut.

7. Degree Programs for Registered Nurses - Program leading to a Bachelor of Science Degree for qualified graduates of an accredited course in nursing. This is not a vocational program.

TABLE A-9a

EXISTING LIBRARIES

								February 1967			
	Under-Grad.[1] FTE 66-67	Grad.[1] FTE 66-67	Total FTE 66-67	Pres.No.[2] of Vols.	American Library Assoc. Min. Stand. Vols.	Pres. Deficit Vols.	Yearly Av. Vols. Added 62-66	Av.Vols[3] Req'd per yr. to catch up in 5 yrs.	Pres. Prof. Staff	Amer. Libr. Assoc. Min. Stand. Pro. Staff	Pres. Deficit Pro. Staff
Central Connecticut	4,953	563	5,516	118,576	295,800	177,224	11,285	35,445	10	19	9
Southern	4,816	729	5,545	117,528	297,250	179,722	14,807	35,944	14	19	5
Danbury	1,526	154	1,680	72,887	104,000	31,113	3,742	6,222	3.5*	6.5*	3
Willimantic	972	115	1,087	41,605	74,350	32,745	2,870	6,549	4	4.6*	0.6*

1. Day enrollment and full-time equivalent of part-time students estimated at 30%. Only on-campus students computed.

2. Figures reported to American Library Association, June 1966.

3. Does not include requirements for enrollment increases.

* Decimal refers to part-time professionals.

TABLE A-9b

February 1967

DEFICIT IN LIBRARY HOLDINGS
CONNECTICUT STATE COLLEGES - Fall 1966

ALA formula $50{,}000 + \dfrac{\text{Enrollment* Equivalent} - 600}{200} \times 10{,}000$ = minimum volumes required

			Min.Vols.Reqd.		Pres.Holdings		Deficit
Central	$50{,}000 + \dfrac{5516 - 600}{200} \times 10{,}000$	=	295,800	-	118,576	=	177,224
Danbury	$50{,}000 + \dfrac{5545 - 600}{200} \times 10{,}000$	=	297,250	-	117,528	=	179,722
Southern	$50{,}000 + \dfrac{1680 - 600}{200} \times 10{,}000$	=	104,000	-	72,887	=	31,113
Willimantic	$50{,}000 + \dfrac{1087 - 600}{200} \times 10{,}000$	=	74,350	-	41,605	=	32,745

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* Full-time Equivalent from Table 1

TABLE A- 9c

February 1967

DEFICIT OF PROFESSIONAL LIBRARIANS
CONNECTICUT STATE COLLEGES

ALA Professional Librarian Formula $3 + \frac{\text{Equivalent* Enrollment} - 600}{300}$ = Professional Librarians Required

			Lib.Reqd.		Pres.Pro.Lib.		Pro. Lib.Deficit
Central	$3 + \frac{5516 - 600}{300}$	=	19	-	10	=	9
Danbury	$3 + \frac{5545 - 600}{300}$	=	19	-	14	=	5
Southern	$3 + \frac{1680 - 600}{300}$	=	6.6	-	3.5	=	3
Willimantic	$3 + \frac{1087 - 600}{300}$	=	4.6	-	4	=	0.6

* Full-time undergraduates and graduates plus full-time equivalents of part-time students.

February 1967

TABLE A-10

(Table continued on next page)

HOUSING - 1966-67

	(1) Full-time Undergrads	(2) Full-time Grads	(3) Total Full-time	(4) Part-time Students (total)	(5) Total Enroll-ment*	(6) Number of Applicants for Housing**	(7) 6 as % of 3
Central							
Male	1,879	80	1,959	--	--	665	34%
Female	2,441	35	2,476	--	--	1,060	43%
Total	4,320	115	4,435	3,604	1,081	1,725	39%
Danbury							
Male	510	--	510	--	--	100	20%
Female	896	--	896	--	--	473	53%
Total	1,406	--	1,406	915	274	573	41%
Southern							
Male	1,553	66	1,619	--	--	--	--
Female	2,762	36	2,798	--	--	--	--
Total	4,315	102	4,417	3,248	973	3,121	71%
Willimantic							
Male	259	--	259	--	--	--	--
Female	584	--	584	--	--	369	63%
Total	843	--	843	814	244	369	44%
TOTAL STATE COLLEGES							
Male	4,201	146	4,347	5,217	9,564	--	--
Female	6,683	71	6,754	6,922	13,676	--	--
Total	10,884	217	11,101	12,139	23,240	5,788	52%

* FTE - Full-time equivalent, estimated at 30% of part-time.

** May contain some who did not attend school.

TABLE A-10

HOUSING (continued)

	(8) Number in Dorms	(9) 8 as % of 3	(10) Number in Approved Housing	(11) 10 as % of 3	(12) Total in Dorms & Approved	(13) 12 as % of 3
Central						
Male	259	13%	590	30%	849	43%
Female	755	30%	1,000	40%	1,755	71%
Total	1,014	23%	1,590	36%	2,604	59%
Danbury						
Male	--	--	60	12%	60	12%
Female	371	41%	94	10%	465	52%
Total	371	26%	154	11%	525	37%
Southern						
Male	116	7%	501	31%	617	38%
Female	494	18%	779	28%	1,273	45%
Total	610	14%	1,280	29%	1,890	43%
Willimantic						
Male	--	--	81	31%	81	31%
Female	241	41%	148	25%	389	67%
Total	241	29%	229	27%	470	56%
TOTAL STATE COLLEGES						
Male	375	9%	1,232	28%	1,607	37%
Female	1,861	28%	2,021	30%	3,882	57%
Total	2,236	20%	3,253	29%	5,489	49%

TABLE A-11 February 1967

PRESENTLY COMMITTED CAPITAL CONSTRUCTION PROGRAM-BUILDINGS

Project	Dollar Value	Completion Date
Central Connecticut State College		
Land Acquisition	$ 400,000.00	
Housing	$1,126,000.00	April 1967
Housing	$1,225,000.00	November 1967
Social Science Classroom	$1,293,000.00	October 1967
Housing	$1,632,000.00	July 1968
Science Classroom	$2,400,000.00	July 1969
Industrial Education Classroom	$2,400,000.00	July 1969
Food Service Facility	$ 730,000.00	September 1968
Athletic Facilities	$ 250,000.00	September 1968
Total	$11,456,000.00	
Danbury State College		
Library	$1,783,000.00	August 1968
Science addition	$1,130,000.00	June 1968
High School renovation	$2,020,000.00	July 1968
Housing	$1,500,000.00	August 1968
Addition to gymnasium	$ 90,000.00	May 1967
Total	$6,523,000.00	
Southern Connecticut State College		
Housing	$3,264,000.00	Spring 1968
Food Service	$1,450,000.00	Spring 1968
Library	$3,500,000.00	Fall 1968
Men's Gymnasium	$2,525,000.00	Winter 1969
Auditorium	$1,500,000.00	Fall 1967
Total	$12,239,000.00	
Willimantic State College		
Science and Math Building	$1,050,000.00	February 1967
Dormitory	$1,620,000.00	October 1968
Food Service	$ 715,000.00	October 1967
Power Plant	$ 750,000.00	August 1968
Library	$1,715,000.00	April 1967
Total	$5,850,000.00	
Four-college Total	$36,068,000.00	

APPENDIX B

CONNECTICUT 1980 - THE CONTEXT FOR GROWTH

In order to help judge the number, size, and characteristics of the Colleges, available planning documents have been examined to determine what Connecticut is likely to be by 1980.

The amount of documentation prepared over the last five years on the State and Regional levels is impressive, and much valuable information on Connecticut's past and future was drawn from them. The major sources consulted are listed in the back of this Appendix.

Not all of these data, statistics, descriptions, and speculations are immediately relevant, though many have been used in making evaluations. From this material, seven aspects of the Connecticut 1980 profile have been identified as being of direct importance to the Board's long-range plan. These are: population growth, components of population change, per capita income, population distribution, composition of the labor force, educational attainment, and regional development. In our discussion of the latter we use regional definitions as established by the Connecticut Interregional Planning Program.

As will be made evident in the descriptions that follow, at least two regions in the state are not adequately served today by public four-year colleges: the southwest urbanized areas and the eastern seaboard along the Norwich-New London axis. In addition, by 1980, the Hartford metropolitan area itself will be large enough to support a four-year institution.

Two of the existing four-year Colleges are right in the center of heavy population, existing and projected: Southern and Central. Willimantic State College is not in a long-range growth area, and Danbury State College is not in a geographic position to serve any of the seven largest projected urban regions.

These conditions vitally affect the long-range plan for developing the State College system as a whole.

Population Growth

Connecticut had 2,535,000 people in 1960. Recent forecasts indicate a possible addition of 610,000 to 1,625,000 people by 1980. Table B-1 lists a sampling of forecasts published between 1962 and 1965. The variations in growth estimates reflect different assumptions as to migration and fertility rates.

The Connecticut Interregional Planning Program forecast of August, 1966 suggests a 1980 population of 3,694,000 people. However, Table B-2 underlines the possibility that this figure and the higher figures in Table B-1 may be conservative.

Table B-2 shows a 1970 forecast of 3,235,000 people, a figure higher than any 1970 prediction made in Table B-1. As is evident from Table B-2, Connecticut continues to be a growth state as compared to New England and the United States and has a noticeable increase in its percentage relationships to both of these areas. The 1965 population figure published by the State Board of Health was 2,825,000 showing a continuation of this trend.

Population forecasts in a growth state present serious problems in long-range planning. For example, a projection of 3.7 million people in 1980 may mean a college-age group (18-24) of approximately 370,000 people. A 1980 projection of 4.4 million people may mean a college-age group of 440,000 people--a difference of 70,000. Such a difference can have significant effects on the timing of capital construction, development of new institutions, and growth of existing colleges.

TABLE B-1 February 1967

RECENT POPULATION PROJECTIONS FOR CONNECTICUT - 1970-2020
(Thousands of Persons)

Source of Projection*	1970	1980	1990	2000	2010	2020
ADL-1	2,943	3,528	4,172	4,839	5,586	6,451
ADL-2	3,056	3,895	4,827	5,829	6,979	8,270
CIPP-1	3,068	3,710	4,558	5,624		
CIPP-2	2,847	3,145	3,992	4,707		
S&I-1	3,196	4,160				
S&I-2	2,898	3,526				
L II-1				5,322		
L II-2				5,145		
L IV-1				4,106		
L IV-2				3,958		
L				4,869		

*Sources of Projection:

ADL-1 Arthur D. Little, Inc. Derived from commodity industry employment projections.

ADL-2 Arthur D. Little, Inc. Derived from demographic or cohort-survival or component method projections.

(Sources continued following page.)

Sources of Projection for TABLE B-1 continued:

CIPP-1 & 2 Connecticut Development Commission, Population, A Demographic Analysis of Connecticut, 1790-2000. Connecticut Interregional Planning Program Technical Report 131, November, 1962. There are two population projections in both of which the future number of males and females aged 10 years and over have been determined by extrapolation of the linear trends in the survival and migration of their respective five-year age groups since 1880. In projection (1), the straight line method, it was assumed that the general ratio of the male and female five-year age groups under 10 years old to the balance of the population in 1960 will remain constant to 2000. In projection (2), the cyclical method, fertility ratios have been related to economic factors of young males entering the labor force and general employment opportunities.

S & I-1 & 2 Edward G. Stockwell and Dorothy G. Ingalls, The Population of Connecticut, Illustrative Projections by Age and Sex, 1960-1980. Bulletin 375, January, 1963. University of Connecticut Agricultural Experimentation Station, Storrs, Connecticut. The two population projections assume a continuation of 1959-60 survival ratios. Projection (1) assumes a continuation of the 1959-60 level of fertility and a continuation of the 1950-60 age-specific migration rates. Projection (2) assumes a linear decline in fertility reaching by 1980 a level 25 per cent below that prevailing during the 1959-60 period and a rate of migration half that of the 1950-60 decade.

L Projections to the Years 1976 and 2000: Economic Growth, Population, Labor Force and Leisure, and Transportation, ORRRC Study Report 23, Washington, D.C., 1962. There are five projections given in this volume. The first four represent combinations of U.S. Census Series II and IV fertility assumptions with two migration assumptions: (1) the high which assumes the annual migration of 1950-58 prevailing to 1970 and then a return to the annual average migration of 1940-58 to 1980, and (2) the low, which assumes that between 1958 and 1980, migration will be half that of 1940-58. From 1980 and 2000, changes in the population

Sources of Projection for TABLE B-1 continued:

share of each state in the total U.S. population correspond to changes for these proportions between 1970 and 1980. The resulting figures are essentially the same as those prepared by the Census Bureau for the Senate Select Committee for National Water Resources. The fifth projection (L) is the ORRRC "judgment" projection which is consistent with its U.S. "judgment" population projection. This embodies fertility assumptions similar to Census Series III and the high migration assumption described above. These appear on pages 13-16 of the source cited.

Compiled by DWH from: Arthur D. Little, Inc., Projective Economic Studies of New England, prepared as part of the Comprehensive Planning Program for the Development and Conservation of Water Resources, U.S. Army Engineer Division, New England, Corps of Engineers, Waltham, Massachusetts, 1964-1965, Appendix F, pp. 3-7.

TABLE B-2

February 1967

RELATIVE GROWTH OF CONNECTICUT, NEW ENGLAND, AND THE UNITED STATES

Year	Connecticut (thousands)	New England (thousands)	United States* (thousands)	Conn. as % of New England	Conn. as % of United States
1900	908	5,592	76,212	16.2	1.19
1910	1,115	6,553	92,228	17.0	1.21
1920	1,381	7,401	106,022	18.7	1.30
1930	1,607	8,166	123,203	19.7	1.30
1940	1,709	8,437	132,165	20.3	1.29
1950	2,007	9,314	151,326	21.5	1.33
1960	2,535	10,509	179,323	24.1	1.41
1970	3,235	12,128	213,547	26.7	1.51

*Alaska and Hawaii included

Source: Connecticut Development Commission, *Connecticut Market Data*, prepared by Business and Industrial Development Division, 1966; citing U.S. Census of Population, 1970 data, National Education Association of the United States, *Financing Education in the 1960's*; p. 25.

For general planning purposes, an estimated figure of 27,000 students was assumed as the size of the student body to be accommodated in the State College system by 1975.

After an inspection of the various forecasts, even these figures appear to be conservative, and may underestimate the size of the student body to be accommodated in the State College system. To note again an earlier recommendation, the Commission for Higher Education is encouraged to consider establishing a data bank and population forecasting system in which yearly reports can be given as to the current trends in the college-age group. This report, coupled with the data presented on the existing enrollments, plus a periodic accounting of the expansion plans of private and public institutions should help give the State a firmer base upon which to make long-range planning decisions. Connecticut has been fortunate in having strong planning programs and interested professionals making various projections. However, figures now available are ambiguous for planning higher educational facilities, and not as precise as they could be--largely because they are not prepared for such a purpose.

In order to give the State College system time to adjust its plans to the possibility that it may have to accommodate larger numbers of students than are now anticipated, a firmer projection of the college-age group, and the State Colleges' share of that age group, should be annually undertaken.

Components of Population Change

Connecticut is the fastest growing state in New England and in Northeastern United States, second only to New Jersey. A significant aspect of this growth has been inmigration.

From 1880 to 1920, in-migration accounted for 50 to 70 per cent of the state's population increase. Most of this increase was composed of foreign-born people. In recent years, this in-migration factor has continued to be substantial; however, most of this increase has been native-born. In every decade since 1920, native-born migrants have accounted for a larger proportion of the decennial population changes than those born abroad. (See Table B-3.) This increase (despite the shutting off of foreign immigration) can be attributed to the economic opportunities available in the state, the effects of the magalopolitan development along the eastern seaboard (in which Connecticut has a strategic location), and the suburbanization of the northern tier of the New York metropolitan area. Unless world conditions change, further decrease can be expected in the foreign-born group.

During the decades ahead a slow, but important, change is expected in in-migration patterns. The increase due to in-migration will slowly drop from the present 44 per cent to about 30 per cent at the end of the century.

It is expected that the natural increase in population and its maturation will tend to fill jobs existing at that time and meet any changes in the economic base. There may be less attraction for workers, and in turn for other people, to move to Connecticut in the next two decades.

The significance these changes may have for the State College system can be judged to be at least three-fold: the College as a factor in sustaining and raising the quality of the public service professions, the College as an influence on acculturation, and the College as a generator of economic development. These observations, though they cannot be precisely documented and described, suggest certain opportunities to which the College system as a whole might be sensitive.

As to the first point, an increasingly larger number

TABLE B-3

February 1967

COMPONENTS OF POPULATION CHANGE IN CONNECTICUT, 1920 - 1960

Components of Change	1920-30	1930-40	1940-50	1950-60
(Thousands of Persons)				
Total Increase:	226.3	102.3	298.0	528.0
Natural Increase:	134.2	59.9	183.2	294.9
Births	313.5	236.1	371.2	508.5
Deaths	179.3	176.3	188.1	213.6
Net In-migration:	92.1	42.4	114.8	233.0
Native White	12.5	32.0	59.8	147.3
Foreign-born White	73.2	7.6	39.2	43.3
Negro	6.4	2.8	15.8	41.7
(Per Cent of Total Increase)				
Total Increase	100.0	100.0	100.0	100.0
Natural Increase:	59.3	58.6	61.5	55.9
Net In-migration:	40.7	41.4	38.5	44.1
Native White	5.5	31.3	20.1	27.9
Foreign-born White	32.4	7.4	13.2	8.2
Negro	2.8	2.7	5.3	7.9

Compiled by DWH from: Connecticut Interregional Planning Program, Connecticut Development Commission, *Connecticut Takes Stock for Action*, State of Connecticut, June, 1964; citing U.S. Bureau of the Census, Connecticut Department of Health; Lee, Miller, Brainerd & Easterlin, *Population Distribution and Economic Growth, United States, 1870-1950*, Volume 1, as shown in C.I.P.P. Report 131; p. 138.

of students will have come from similar backgrounds, will share similar values, and will have passed through similar experiences. There are thus likely to be subtle shifts in perspectives and expectations away from earlier ethnic attitudes on occupation, status, and educational interests.

As the State Colleges develop a more comprehensive college curriculum--as opposed to one which today is largely, but not exclusively, devoted to the preparation of teachers--they must get adequate financial support to maintain the quality of their public service programs, especially education and the social services. If they are to continue to attract highly qualified students, then the present level of support may even have to be increased.

Second is the development of a full range of programs so that students might be better prepared to understand the common denominator of perspectives and values which is increasingly apparent in our technological society, and at the same time encourage them to seek the differences and variety of life styles which will be needed to survive in the crowded, uncertain future world.

The range would include variety in educational programs offered at each of the State Colleges, variety in student housing patterns, variety in extracurricular activities, variety in traditions, and perhaps even important differences in the basic organization of each College and its method of teaching when compared to any other College in the State College system.

If it can be said, in looking at the population composition of the State of Connecticut over the past 80 years that the role of the State Colleges in the past was to make its students (and the students of its students) more alike than different, is not the task today to go in the opposite direction (in moderation, of course)?

A small but important exception to the above generalizations may be the rise in the percentage and number of Negroes in the population of Connecticut. Today, this group has special problems of cultural assimilation. As a guideline principle, more-than-equal opportunity for education may be needed until such time as discrimination and segregation are diminished. This too is a sensitive opportunity for State Colleges.

Third is the possible role of the Colleges in regional economic development. This may be done directly by being a source of employment in educational, research, service and supporting programs; or as a stabilizing or generating force on the value of local real estate; or indirectly by representing a cultural asset which would encourage new industries to locate within the immediate area served by the College.

Because of the number of public and private institutions within an hour's driving distance of most parts of the state--particularly in Connecticut's urbanized regions--these last factors may not be as important as the first.

For example, a prospectus on industrial sites prepared by the Greater Waterbury Chamber of Commerce in 1965 pointed out that the following institutions were within an hour's driving time, under optimum traveling conditions, from the center of Waterbury: Fairfield University, University of Connecticut, and Wesleyan University. The following were within one half hour's drive: Post Junior College, Trinity College, University of Hartford, the Waterbury Branch of the University of Connecticut, Waterbury State Technical Institute, and Yale University. Not listed in the Chamber of Commerce report, but also within one half hour's driving time are Southern Connecticut State College and Central Connecticut State College.

Other urban regions in Connecticut are similarly favored thus illustrating the compactness of the State, its well developed highway system and the convenient location to many different kinds of higher educational institutions.

Income

Connecticut is fortunate in having one of the highest per capita incomes in the Nation. Table B-4 shows the recent rankings nationally in comparison with other states. This high position on the list is due in part to the skilled labor industries which the State attracts and holds. This, in turn, creates high income service and retail activities. In addition the state has a relatively large number of wealthy people and has relatively few people in the low-paying farm and mining industries. Figure B-1 indicates sources of personal income.

This high per capita income has enabled the state historically to maintain a fairly high standard of living and strong tax base. In recent years, however, the relative position of Connecticut vis-a-vis other states has changed, as shown in Table B-5. In 1930, Connecticut's per capita income was 48 per cent above the national figure, but in 1960 this has dropped to 29 per cent.

The decline may be due to at least two events. First, the nation as a whole has improved its economic position so that the per capita difference among the states is smaller than in the past. Second, Connecticut continues to gain a large proportion of its income from manufacturing (see Table B-6), which does not produce as high an income per capita as the service industries.

Per capita income is a good index of the relative wealth of a state or region and the means it has available for publicly supported activities. The prospect in Connecticut continues to be bright for a rising income. Tables B-7 and B-8 indicate the expected rise to 1980. Though the projections use two different bases (1954 and 1960 dollars), both indicate an increase of about $1200 in per capita income, a rise of

TABLE B-4

CONNECTICUT'S RANK IN PER CAPITA PERSONAL INCOME, 1960-1964

Year	Rank	Amount
1960	Second	$2,854
1961	Second	2,934
1962	Third	3,058
1963	Third	3,127
1964	Second	3,281

Source: Connecticut Development Commission, Connecticut Market Data, Prepared by Business and Industrial Development Division, 1966; citing U.S. Department of Commerce Survey of Current Business; p.55.

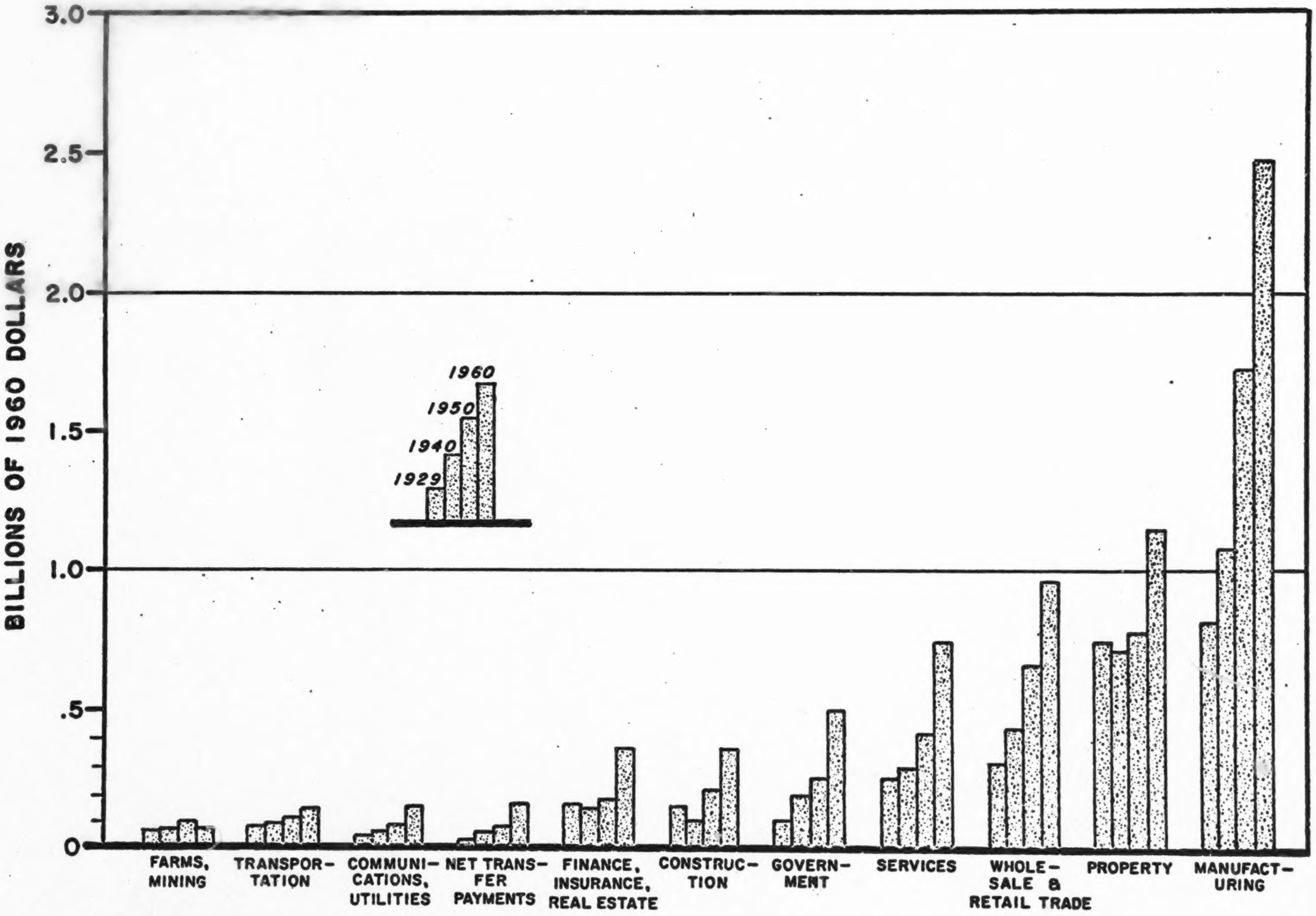

Figure B-1 SOURCES OF PERSONAL INCOME IN CONNECTICUT.
Source: CIPP, Labor Force, Technical Report 132, December, 1962, p. 58.

TABLE B-5

TOTAL AND PER CAPITA PERSONAL INCOME IN SELECTED AREAS, 1930-1960

Area	1930	1940	1950	1960
Total Personal Income:		(Billions of 1960 Dollars)		
United States (1)	$136.0	$165.8	$277.4	$400.0
Mideast (2)	45.3	50.5	73.1	100.0
New England (3)	11.7	13.4	18.6	26.1
Connecticut	2.6	3.3	4.7	7.3
Per Capita Personal Income:		(1960 Dollars)		
United States (1)	$1,106	$1,255	$1,834	$2,223
Mideast (2)	1,578	1,667	2,164	2,591
New England (3)	1,429	1,597	2,004	2,471
Connecticut	1,642	1,935	2,337	2,863
Per Capita Personal Income:		(Per Cent of United States)		
United States (1)	100%	100%	100%	100%
Mideast (2)	143	133	118	117
New England (3)	129	127	109	111
Connecticut	148	154	128	129

(1) Continental United States

(2) New York, New Jersey, Pennsylvania, Delaware, Maryland, District of Columbia.

(3) Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut

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Source: Connecticut Interregional Planning Program, Connecticut Development Commission, Labor Force, Technical Report 132, December, 1962, p. 50.

TABLE B-6

February 1967

SOURCES OF PERSONAL INCOME IN CONNECTICUT, 1929-1960

Source	Connecticut 1929	Connecticut 1940	Connecticut 1950	Connecticut 1960	New England 1960	United States 1960
	(Per Cent of Totals *)					
All Sources of Income	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
From Current Production:						
Farms	2.3	1.9	2.0	0.9	1.2	3.7
Mining	0.2	0.1	0.1	0.1	0.1	1.1
Contract Construction	5.7	3.3	4.6	5.0	4.5	5.3
Manufacturing	29.0	33.0	36.1	34.3	29.3	23.6
Wholesale and Retail Trade	11.1	13.3	13.8	13.2	13.9	15.6
Finance, Insurance, Real Estate	5.7	4.5	4.0	5.0	4.3	4.1
Transportation	3.2	2.6	2.5	2.0	2.4	4.0
Communications and Utilities	1.7	1.9	1.9	2.1	2.2	2.2
Services	9.3	9.1	8.9	10.3	10.8	10.4
Government (non-military)	3.8	6.1	4.8	6.1	8.0	9.6
Other Industries	0.2	0.3	0.4	0.4	0.4	0.3
Military	0.2	0.3	0.6	0.9	1.8	2.0
From Other Sources:						
Property	26.4	21.7	16.4	15.9	14.8	13.0
Net Transfer Payments	1.2	1.8	3.7	3.7	6.0	5.0

* Percentages may not total 100 due to rounding.

Source: Connecticut Interregional Planning Program, Connecticut Development Commission, Labor Force, Technical Report 132, December, 1962; citing Office of Business Economics, U.S. Department of Commerce; pp. 92, 93.

TABLE B-7

February 1967

PROJECTIONS OF PERSONAL INCOME IN CONNECTICUT

Year	Total Income (Millions of 1960 Dollars)	Per Capita Income (1960 Dollars)
1960	$ 7,295	$2,863
1970	11,474	3,531
1980	17,112	4,048
1990	24,329	4,565
2000	33,122	5,082

Compiled by DWH from: Connecticut Interregional Planning Program, Connecticut Development Commission, Labor Force, Technical Report 132, December, 1962; citing CIPP, Booz, Allen & Hamilton, and National Planning Association; p. 52.

TABLE B-8

PER CAPITA PERSONAL INCOME IN THE NEW ENGLAND STATES, 1960-2020

(1954 Dollars)

State	1960	1970	1980	1990	2000	2010	2020
CONNECTICUT	$2,502	$3,126	$3,770	$4,530	$5,518	$6,713	$8,216
MAINE	1,641	2,158	2,663	3,161	3,886	4,722	5,750
MASSACHUSETTS	2,199	2,770	3,367	4,048	4,930	5,986	7,329
NEW HAMPSHIRE	1,824	2,283	2,815	3,340	4,105	4,904	6,072
RHODE ISLAND	1,907	2,474	2,947	3,496	4,327	5,241	6,406
VERMONT	1,647	2,071	2,749	3,246	3,919	4,684	5,828
NEW ENGLAND	2,150	2,728	3,324	3,989	4,872	5,916	7,255

Source: Arthur D. Little, Inc., Projective Economic Studies of New England, prepared as part of the Comprehensive Planning Program for the Development and Conservation of Water Resources, U.S. Army Engineer Division, New England, Corps of Engineers, Waltham, Massachusetts, 1964-1965, Appendix II, p. G-3.

approximately 50 per cent between 1960 and 1980. Table B-7 shows a projected 1980 total personal income of about 17 billion dollars, or a 135 per cent increase in personal income over 1960. This interpretation of the personal and per capita increases in income figures suggests that Connecticut should have the resources to improve and expand its institutions of higher education.

Income Distribution

While over-all income figures are very high in Connecticut, the distribution of that income is uneven. In 1959, half of the families in the State had incomes under $6900. Connecticut median income in 1959 was $6887. This was higher than the median income in the United States. However, almost 10 per cent of the families in Connecticut had yearly incomes of less than $3000 and almost 40 per cent less than $6000 in 1959. (See Table B-9.) No statistics are available as to how many of these families have college-age children, but even after accounting for the probability that some of these low-income families are not involved in financing college education (older people, single people, etc.) there are still significant numbers of Connecticut families for whom a college education represents a sizable part of their family budget. This is especially true for a residential college education.

Even assuming that the distribution of family income will soon improve and family incomes will rise, a significant though numerically minor number of families may continue to face economic barriers to sending their children away to college. Furthermore, nationally, college costs to the student appear to be rising at a faster rate than family income, and more families may be faced with some economic hardships.

We do not feel it proper to judge how much a family

TABLE B-9 February 1967

FAMILY INCOME IN CONNECTICUT PLANNING REGIONS - 1959

Planning Region	Median Income (Dollars)	Per Cent of Regional Totals * Under $3000	$3000-$5999	$6000-$9999	$10,000 and up
Total State	$6,887	9.8%	29.1%	39.0%	22.0%
Urban Regions					
Capitol	7,235	8.8	26.1	41.1	24.0
South Central Connecticut	6,714	10.3	30.2	39.5	19.8
Southwestern Connecticut	8,504	7.5	21.0	31.4	40.2
Greater Bridgeport	6,748	11.1	29.8	38.2	20.8
Central Naugatuck Valley	6,896	9.0	29.4	41.4	20.1
New Britain-Bristol [1]	6,706	8.9	31.4	42.3	17.5
Ansonia-Derby	6,393	10.2	33.9	41.7	14.3
Semi-urban Regions					
Southeastern Connecticut	6,350	12.2	33.3	37.4	16.9
Danbury [2]	6,834	9.8	30.3	38.0	21.8
Midstate	6,763	8.3	31.1	43.1	17.4
Torrington-Winchester	6,432	11.2	32.8	39.1	16.9
Unaffiliated Towns	6,467	8.8	33.7	43.1	14.4
Windham	6,397	11.6	33.0	40.2	15.1
Rural Regions					
Northeastern Connecticut	5,742	16.2	37.3	36.0	10.5
Connecticut River Estuary	6,450	13.1	31.4	37.2	18.4
Northwestern Connecticut	5,813	14.2	38.4	29.6	17.7

*Percentages may not total 100 due to rounding.

1. Currently called Central Connecticut Planning Region
2. Currently called Housatonic Valley Planning Region

Compiled by DWH from: Connecticut Interregional Planning Program, Connecticut Development Commission, Labor Force, Technical Report 132, December, 1962; citing U.S. Bureau Census; p. 89.

should sacrifice for a college education. We doubt that any well-qualified student in Connecticut is presently denied a college education because of lack of resources--if he makes his qualifications and needs known. However, we estimate that a sizable number of Connecticut youth finds it difficult to attend a residential college and that the probable number of such students in the total population will not significantly change in the future, especially as college becomes a more common experience for those in the lower income groups.

Accordingly, a fundamental policy issue can be raised. To what extent will the State Colleges be accessible to the students who cannot afford a residential education? This question has particular relevancy for the State of Connecticut as projected 1980 highway improvements will provide unique opportunities for placing any new campus--which may be developed in response to population growth and urbanization--at locations which could serve optimum numbers of people.

Accessibility

Accessibility can be viewed in two ways: economic accessibility and geographic accessibility. The following paragraphs are concerned with the first. Later sections will discuss geographic accessibility.

We estimate that at least a third of Connecticut's families with college-age children may find commuting the only means of having access to a four-year college education. Though the income structure in Connecticut is shifting towards a higher per capita income and rising family income, there is nothing significant about these changes to suggest that low-income families in Connecticut will be able to afford a residential education for their children in the future. If we consider the uncertainties of inflation, Connecticut's dependence on defense-related industries for many of its manufacturing jobs (and in turn family income), and other demands on family income (such as rising medical costs), then the State College system should anticipate a significant number of commuting students.

In our view, accessibility to the large urban populations in Connecticut is a major consideration in developing the State College system. While full recognition is given to the values of a residential education, Connecticut cannot afford to develop a State College system which is heavily dependent on campus housing--especially in view of some of the possible conditions mentioned above. The best long-range plan is one which encourages the development of campus housing and is also reasonably accessible for students who choose to commute.

In order to evaluate the question of accessibility, we have attempted to give a rough approximation of the size of the State Colleges and the number of commuting students.

Using middle-range population projections for 1980 (Connecticut Interregional Planning Program - August 1966), the seven largest expected urban concentrations are these (the major core city is indicated in parentheses):

1.	Capitol Region (Hartford)	811,000
2.	South Central Connecticut (New Haven)	617,000
3.	Southwestern Connecticut (Stamford)	410,000
4.	Greater Bridgeport (Bridgeport)	347,000
5.	Central Naugatuck Valley (Waterbury)	289,000
6.	Southeastern Connecticut (Norwich)	267,000
7.	Central Connecticut (New Britain)	256,000

These seven regions will have about three million of the projected 3.7 million people (81%) in Connecticut by 1980.

The first four regions will have 2.2 million of the total 3.7 million people (59%).

Table B-10 shows the probable college-age group (18-24) for each of the seven major urban regions. This figure represents 10 per cent of the total population in the region. We have distributed the possible State College share of the college population, varying the distribution as follows: 20, 15, and 10 per cent of the total college-age population. We then indicate the possible number of commuter students in each region on the basis of assuming alternatively 33, 25, and 20 per cent commuting to a four-year State College in each region.

Looking at the total figures in the college-age group in Connecticut in 1980, it appears there may be about 299,700 students at that time. The State Colleges' share, based on the above estimates, may range from 30,100 to 59,800 depending on a number of circumstances difficult to evaluate. Some examples of such circumstances are the following: the ability of the private institutions in 1980 to continue to enroll their present percentage of the total college-age group; the possibility that an increasing number of students will want to complete a four-year program; the possibility that educational improvements in the pre-school, elementary, and secondary schools will expand the number of students qualified for a four-year college education; the possibility that the quality of the State College system will of itself increase the demand; the possibility that changes in the labor force, work week, and related economic conditions will require a larger number of people to complete a college education; and the continuation of the trend for education beyond the Bachelor's level.

In the light of these considerations, we believe that the above estimates of the State Colleges' share of the college-age group in 1980 may be closer to the middle range 1980 estimate in Table B-10, i.e. 45,000.

TABLE B-10

February 1967

POSSIBLE SIZE OF 1980 STATE COLLEGE ENROLLMENT AND PERCENTAGE OF COMMUTER STUDENTS GENERATED BY EACH REGION

(Rounded Numbers)

	Capitol	South Central Conn.	South-western Conn.	Greater Bridge-port	Central Naugatuck Valley	South-eastern Conn.	Central Conn.	Totals*
College Age Group**	81,100	61,700	41,000	34,700	28,900	26,700	25,600	299,700
20% in State Colleges	16,200	12,300	8,200	6,900	5,800	5,300	5,100	59,800
1/3 Commute	5,400	4,100	2,700	2,300	1,900	1,800	1,700	19,900
1/4 Commute	4,100	3,100	2,100	1,700	1,400	1,300	1,300	15,000
1/5 Commute	3,200	2,500	1,600	1,400	1,200	1,100	1,000	12,000
15% in State Colleges	12,200	9,300	6,200	5,200	4,300	4,000	3,800	45,000
1/3 Commute	4,100	3,100	2,100	1,700	1,400	1,300	1,300	15,000

*Discrepancies between added and calculated totals due to rounding.

**10% of total population.

TABLE B-10 (continued)

	Capitol	South Central Conn.	South-western Conn.	Greater Bridge-port	Central Naugatuck Valley	South-eastern Conn.	Central Conn.	Totals*
1/4 Commute	3,000	2,300	1,500	1,300	1,100	1,000	1,000	11,200
1/5 Commute	2,400	1,900	1,200	1,000	900	800	800	9,000
10% in State Colleges	8,100	6,200	4,100	3,500	2,900	2,700	2,600	30,100
1/3 Commute	2,700	2,100	1,400	1,200	1,000	900	900	10,200
1/4 Commute	2,000	1,500	1,000	900	700	700	600	7,400
1/5 Commute	1,600	1,200	800	700	600	500	500	5,900

*Discrepancies between added and calculated totals due to rounding.

Compiled by DWH

The number of possible commuter students in 1980 is significantly large at both the low and high end of the State College's share of the college-age group. It is quite possible that a larger percentage of students will commute than that shown in Table B-10. We estimate a range from 5,900 to 19,900, and we believe these could be conservative figures if college housing were not constructed and family income distribution did not significantly change.

Based on the above calculations, one could reason that by 1980 each of the seven urban regions could generate sufficient students for a State College, assuming that in each region one out of 10 people in the college-age group attends a State College.

Finally, and for illustrative purposes only, if each of the seven major regions had a college, equal to the number of students it would generate for the State College system, then the sizes of the Colleges would be as follows in order of size of region:

1.	Capitol Region	8,100 students
2.	South Central Connecticut	6,200 students
3.	Southwestern Connecticut	4,100 students
4.	Greater Bridgeport	3,500 students
5.	Central Naugatuck Valley	2,900 students
6.	Southeastern Connecticut	2,700 students
7.	Central Connecticut	2,600 students

The smallest college in this list is as large as the smallest college now being planned by the Board--Willimantic's long-range expansion figure is currently set at 2,500 students.

The possibility of a four-year college in each of the regions is at first glance an attractive proposition, and this leads to the question of regional growth and the geographic accessibility of one region to another, and in turn the options available for decision making on location and size of existing and possible new campuses.

Population Distribution

Not all the population growth expected in 1980 will occur uniformly throughout the state. Table B-11 shows the population expectations in each of the regions in the state. The first five regions ranked in population size in 1960 are expected to hold their rank order in 1980. The sixth and seventh will reverse order of rank by a small change in size.

Much of the urbanization will parallel the major highway networks, existing and planned. A mega-city (conurbation) will extend from the southwest corner of the state through Stamford, Norwalk, Bridgeport, New Haven, New Britain to Hartford, and northward. This mega-city will contain about two-thirds of the state's 1980 population.

In examining this mega-city, it should be noted that the central areas are accessible to both Central Connecticut State College and Southern Connecticut State College. However, the northern and southern ends of the mega-city are not as readily accessible to a State College. Of the two ends, the southern area (the Southwestern Region) is most remote from an existing four-year State College. On this basis and that of population size, in our view, it would have first priority in the development of new campuses.

Each succeeding population forecast of recent years for the Southwestern Region has shown either higher population expectations than previous forecasts or filling-in of the available land earlier than predicted. This is due to a number of reasons, no one of which itself is predominant, but taken together are impressive.

The southwest area is the hinge for several transportation corridors between the northern and central parts of the Atlantic seaboard. It contains some of the most attractive residential areas in metropolitan New York. Manufacturing employment is concentrated in non-electrical and electrical equipment and the printing and publishing industries--

TABLE B-11

February 1967

POPULATION PROJECTIONS - 1960-1980-2000 - PLANNING REGIONS RANKED BY SIZE

1960	1980	2000
1. Capitol Region 546,545	1. Capitol Region 811,000	1. Capitol Region 1,125,000
2. South Central Connecticut 448,835	2. South Central Connecticut 617,000	2. South Central Connecticut 773,000
3. Southwestern Connecticut 279,204	3. Southwestern Connecticut 410,000	3. Central Naugatuck Valley 446,000
4. Greater Bridgeport 278,131	4. Greater Bridgeport 347,000	4. Southeastern Connecticut 444,000
5. Central Naugatuck Valley 195,512	5. Central Naugatuck Valley 289,000	5. Southwestern Connecticut 433,000
6. Central Connecticut 186,667	6. Southeastern Connecticut 267,000	6. Greater Bridgeport 383,000
7. Southeastern Connecticut 174,412	7. Central Connecticut 256,000	7. Central Connecticut 353,000
8. Housatonic Valley 87,280	8. Housatonic Valley 159,000	8. Housatonic Valley 275,000
9. Midstate Region 62,746	9. Midstate Region 119,000	9. Midstate Region 199,000

TABLE B-11 (contd.)

1960		1980		2000	
10. Ansonia-Derby	60,241	10. Ansonia-Derby	82,000	10. Torrington-Winchester	133,000
11. Torrington-Winchester	59,648	11. Torrington-Winchester	81,000	11. Northeastern Connecticut	131,000
12. Windham	48,732	12. Northeastern Connecticut	76,000	12. Windham	126,000
13. Northeastern Connecticut	47,436	13. Windham	74,000	13 Ansonia-Derby	116,000
14. Connecticut River Estuary	30,370	14. Connecticut River Estuary	62,000	14. Connecticut River Estuary	116,000
15. Northwestern Connecticut	15,928	15. Northwestern Connecticut	23,000	15. Northwestern Connecticut	34,000
Non-region	13,547	Non-region	21,000	Non-region	34,000
STATE TOTAL	2,535,234	STATE TOTAL	3,694,000	STATE TOTAL	5,121,000

Compiled by DWH: From Connecticut Interregional Planning Program, "Preliminary Town Population Projections," Connecticut Interregional Planning Program News, Volume 2, Number 3, August 1966.

highly skilled and remunerative economic activities all with a bright future. Proximity to cultural and recreational resources is excellent.

Because land-development opportunities are diminishing, population growth is so vigorous, and the presence of a four-year public college is an ideal way of sustaining suitable high yield economic growth, immediate action on developing a new college in the southwest is in the best interests of the State.

Metropolitan Hartford has reached the take-off stage in urban development, and a population of 1.1 million is forecasted for the year 2000, with 811,000 people by 1980. It is a regional shopping, cultural, and educational center, and the midway point on transportation routes between New York and Boston.

Transportation equipment, non-electrical machinery and fabricated metals are important growth industries nationwide and strongly represented in the Hartford area. As the Capital of the State and a major national center for insurance companies, it has a stable and growing economic base. Excellent regional planning measures assure urbanization patterns of high environmental quality. Rising expectations for public higher education, and the largest regional population in the state, are the main factors in justifying the development of a new campus. Since many parts of the Hartford area are within comfortable commuting distances of Central Connecticut State College, a greatly enlarged campus in New Britain would probably be required if a Hartford campus were not developed.

Though not as dense as the mega-city, the land adjacent to the Connecticut Turnpike, along the New London-Norwich axis and in both directions, by 1980 will have grown in population large enough to support a public four-year institution. A campus in this area in addition to the southwest and Hartford would then give the State excellent coverage for a predominant percentage of the expected college-age group.

Of the three regions now under discussion, the Southeastern Region is the smallest and has the most uncertain development pattern. The Region is well served by convenient transportation--both rail and expressway. The latter is only recently opened and its full impact is yet to be felt. Land and labor supply are good.

Present economic activity is largely related to defense industries--transportation equipment, textiles, and other government work. The area has an excellent potential for a diversified economic base, especially industries that may emerge from development of ocean-based resources. Stronger regional planning support is needed to capitalize on these possibilities and in this regard a four-year public college would be a useful economic development asset.

Among the other urban regions Greater Bridgeport and Ansonia-Derby are geographically accessible to Central Connecticut State College and Waterbury is accessible to both Central Connecticut State College and Southern Connecticut State College. Waterbury's presently favorable position will improve further with the completion of proposed State and Interstate Highways I 84, I 91, and 72.

As noted earlier, the compactness of the State and its excellent highway system places many regions and institutions within reasonable driving distance of each other. Thus the criteria of accessibility can be met either by having a State College in each of the urban regions, or by developing a system that recognizes the existing and emerging urbanization pattern and the proximity of one place to another.

Composition of the Labor Force

Figure B-2 shows the composition of the labor force by regions. Table B-12 indicates the distribution of population in the labor force from 1930 to 1960 and the predicted distribution to the end of the Century. The percentage of the

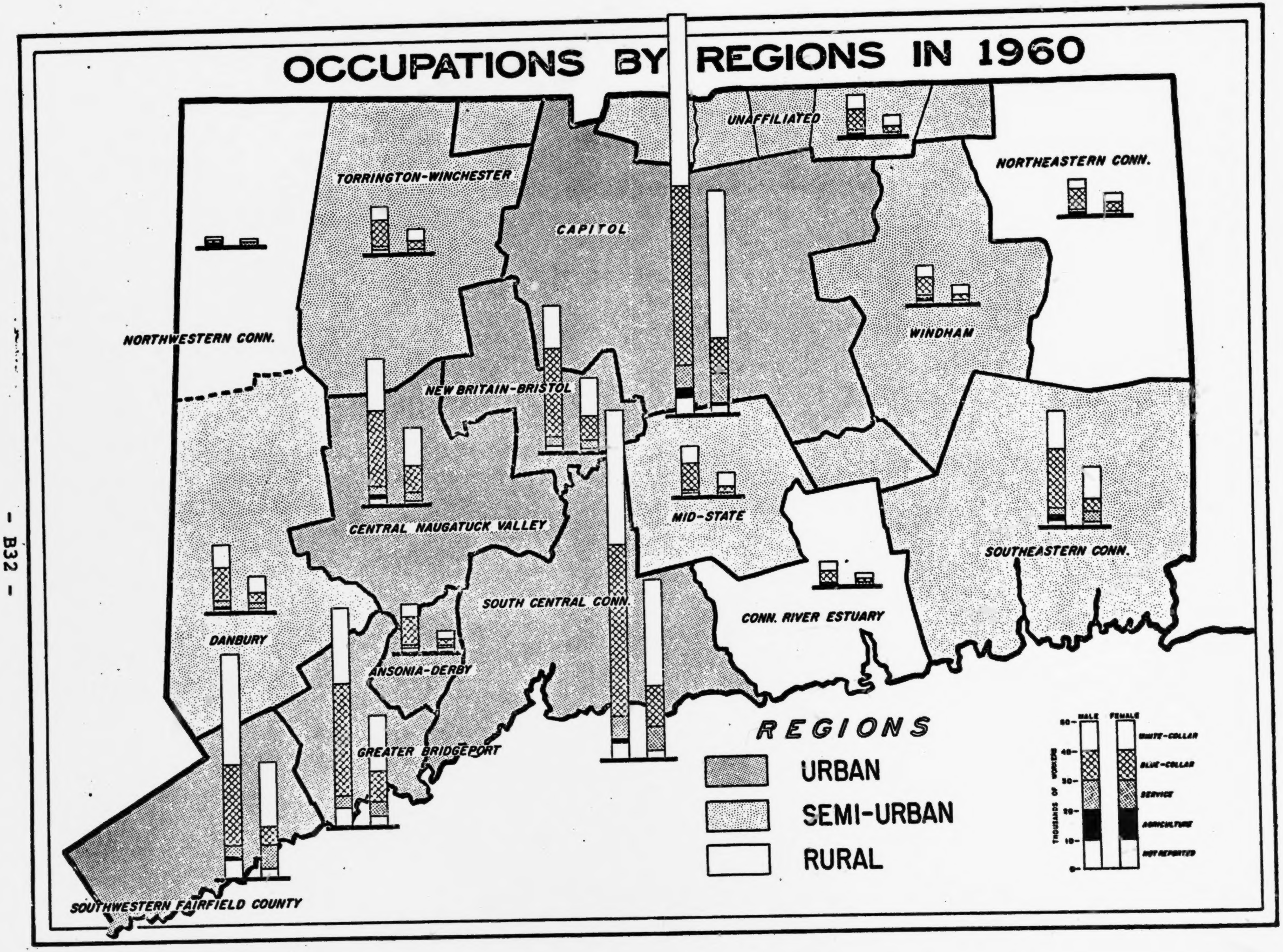
OCCUPATIONS BY REGIONS IN 1960
UNAFFILIATED
NORTHEASTERN CONN.
TORRINGTON-WINCHESTER
CAPITOL
WINDHAM
NORTHWESTERN CONN.
NEW BRITAIN-BRISTOL
MID-STATE
CENTRAL NAUGATUCK VALLEY
SOUTHEASTERN CONN.
SOUTH CENTRAL CONN.
CONN. RIVER ESTUARY
DANBURY
ANSONIA-DERBY
GREATER BRIDGEPORT
SOUTHWESTERN FAIRFIELD COUNTY
REGIONS
URBAN
SEMI-URBAN
RURAL
MALE
FEMALE
THOUSANDS OF WORKERS
50
40
30
20
10
0
WHITE-COLLAR
BLUE-COLLAR
SERVICE
AGRICULTURE
NOT REPORTED

Figure B-2
Source: CIPP, Labor Force, Technical Report 132, December, 1962, p. 22.

TABLE B-12

February 1967

CONNECTICUT'S POPULATION AND LABOR FORCE BY INDUSTRY GROUP, 1930-2000

	1930	1940	1950	1960	1970	1980	1990	2000
	(Thousands of Persons)							
Total Population:	1607	1709	2007	2535	3074	3698	4317	5124
Population not in Labor Force	950	939	1126	1464	1783	2145	2504	2972
Labor Force:	677	770	881	1071	1291	1553	1813	2152
Unemployed	51	90	47	48	52	62	73	86
Armed Forces	-	2	7	12	13	14	15	16
Employed Civilians	626	679	828	1010	1226	1477	1725	2050
Resource industries	37	28	26	19	17	14	13	11
Manufacturing	258	298	354	407	472	537	584	621
Service industries	331	353	448	584	737	926	1128	1418
	(Per Cent of Population)							
Labor Force:	42.1	45.1	43.9	42.2	42.0	42.0	42.0	42.0
	(Per Cent of Labor Force)							
Labor Force:	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Unemployed	7.6	11.7	5.3	4.5	4.0	4.0	4.0	4.0
Armed Forces	-	0.3	0.8	1.1	1.0	0.9	0.8	0.7
Employed Civilians	92.4	88.2	94.0	94.3	95.0	95.1	95.2	95.3
Resource industries	5.5	3.6	3.0	1.8	1.3	0.9	0.7	0.5
Manufacturing	38.1	38.7	40.2	38.0	36.6	34.6	32.2	28.9
Service industries	48.8	45.9	50.8	54.5	57.1	59.6	62.3	65.9

Source: Connecticut Interregional Planning Program, Connecticut's Population and Labor Force by Industry Group, 1930-2000, Hartford, Connecticut, Revised July, 1965; citing U.S. Census of Population (1930-1960 data), CIPP projections.

population in the labor force is expected to remain about the same in the future, i.e. 42% of the total population. Farming, mining, and resource occupations are expected to continue to decline. The most important shifts, however, will occur in the changing mixture of jobs in the manufacturing and service industries. The net increase in manufacturing jobs is expected to be 130,000, while the service industries will add 342,000 jobs by 1980.

Despite a relative decline in manufacturing, Connecticut will have one out of three of its forecasted labor force in manufacturing in 1980, or one out of seven people of the whole population.

This labor force is vulnerable to external conditions such as changing technologies in manufacturing and the fact that about a third of all manufacturing jobs are directly or indirectly dependent on defense contract work. The possible changes and impacts of both conditions are difficult to judge or anticipate.

Education, however, can play a buffer role to the extent that a highly-educated population can make retraining and continuing education a very feasible undertaking and that mobility from one job sector to another can be facilitated.

We believe that if one-third of the future labor force in Connecticut is to be involved in manufacturing in the future, then the State College system should review its possible role in manpower training. This might begin with an examination of the possible introduction of an industrial management curriculum in one of the Colleges.

The dominance of service industries in the future suggests an increasing enlargement of the traditional role of the State Colleges: teacher education, social service, and general education.

Educational Achievement

In 1910, one out of three Connecticut children under 16 were enrolled in school; in 1960, nine out of 10 were enrolled in school. Compulsory education, changes in cultural attitudes about education, and increasing opportunities and resources have been factors that altered the past pattern at the elementary and secondary school levels. Equally dramatic changes can be expected at the college level.

Table B-13 shows the median school years completed by the population in 1960. Table B-14 shows the percentage of persons actually enrolled in 1960.

Several aspects of these tables are worth noting. In the higher education group, 18 years old and older, fewer females than males are enrolled in higher education. Progressively, the gap gets larger as the age group grows older. At age 21, there are 50 per cent fewer females than males in the higher education group. This suggests that if equal opportunities are presented, a significant rise in enrollments could occur through a slight change in male to female mix of students. We expect such a change to occur especially if State Colleges are developed within reasonable commuting distance of the major urban population centers.

In the college-age group 19 and over, there are significant differences between the percentage of white and non-white males enrolled in higher education. Since we should anticipate further improvements in race relationships and increasing opportunities for this population group, further increases in college enrollments can be expected from this quarter. This should be statistically significant as the proportion of non-whites in Connecticut's population rises.

There are significant reductions in numbers of students enrolled in school from ages 16 onward, both male, female, white and non-white. The considerable progress made in Federal and State welfare and education programs should have the effect of increasing these percentages and in turn increasing the number of qualified students in the college-age group.

TABLE B-13 February 1967

MEDIAN SCHOOL YEARS COMPLETED TOTAL POPULATION 1950 AND 1960, AND MEDIAN SCHOOL YEARS COMPLETED NON-WHITE POPULATION 1960

	1950		1960		1960	
	Male	Female	Male	Female	Male	Female
					Non-white	
14 years and over	9.8	10.3	10.6	11.1	9.1	9.9
14-24 years	10.7	11.4	10.6	11.2	9.8	10.7
25 years and over	9.4	9.9	10.5	11.0	8.8	9.5
25 to 29 years	12.1	12.3	12.4	12.4	10.8	11.6
30 to 34 years	12.0	12.1	12.3	12.3	10.3	11.1
35 to 39 years	10.5	10.7	12.2	12.3	9.5	10.5
40 to 44 years	9.9	10.2	11.9	12.1	8.6	9.4
45 to 49 years	8.9	9.0	10.4	10.5	8.3	8.6
50 to 54 years	8.9	9.0	9.6	10.0	8.1	8.5
55 to 59 years	8.4	8.5	8.9	9.0	7.8	8.2
60 to 64 years	8.4	8.5	8.6	8.7	8.1	8.0
65 to 69 years	8.2	8.4	8.3	8.5	7.2	7.8
70 to 74 years	8.2	8.4	8.2	8.4	6.9	6.9
75 years and over	8.2	8.4	8.2	8.4	7.1	6.6

Compiled by DWH from: U.S. Bureau of the Census, U.S. Census of Population: 1960, Detailed Characteristics, Connecticut, Final Report PC(1)-8D, U.S. Government Printing Office, Washington, D.C., 1962, pp. 202-203.

TABLE B-14

February 1967

PERCENTAGE OF PERSONS ENROLLED IN SCHOOL (BY AGE) 1960 AND PERCENTAGE OF NON-WHITE PERSONS ENROLLED IN SCHOOL (BY AGE) 1960

	Total Males	Total Female	Non-white Males	Non-white Females
5 to 34 years total	57.4%	52.1%	48.3%	45.1%
5 years	69.2	67.6	77.3	75.7
6 years	94.1	94.5	94.7	94.1
7 years	98.3	98.1	97.5	96.7
8 years	98.1	98.2	97.1	95.3
9 years	98.4	98.7	97.0	97.3
10 years	98.5	98.5	97.9	96.0
11 years	98.4	98.1	96.5	96.7
12 years	98.2	97.9	96.9	96.1
13 years	97.6	97.6	97.0	97.3
14 years	96.3	96.5	91.0	92.6
15 years	94.7	95.5	88.0	89.4
16 years	85.9	89.4	71.7	85.4
17 years	78.4	79.0	59.5	59.7
18 years	57.5	48.5	39.8	34.5
19 years	42.2	29.6	18.6	11.3
20 years	34.6	19.8	19.7	8.1
21 years	27.8	13.7	7.1	5.2
22 years	19.6	7.3	3.8	4.9
23 years	16.1	4.6	6.0	4.7
24 years	15.0	3.6	6.2	6.0
25 to 29 years	9.1	2.4	4.9	4.1
30 to 34 years	4.2	2.0	3.3	2.0

Total state, 5 to 34 years: 54.7%

Total state, 5 to 34 years: 46.7%

Compiled by DWH: From the U.S. Bureau of the Census, U.S. Census of Population: 1960, Detailed Characteristics, Connecticut, Final Report PC(1)-8D, U.S. Government Printing Office, Washington, D.C., 1962, pp. 192-195.

TABLE B-15

February 1967

PROJECTED SCHOOL ENROLLMENT RATES IN CONNECTICUT

School Age Group	Actual 1960	Straight Projection				Cyclical Projection Constant
		1970	1980	1990	2000	
5-6 years	81.1%	82.5%	85.0%	86.5%	87.5%	81.1%
7-13 years	98.2	98.2	98.3	98.3	98.4	98.2
14-15 years	95.8	95.8	96.0	96.0	96.4	95.8
16-17 years	83.1	83.5	85.0	86.5	88.0	83.1
18-19 years	44.8	48.0	50.5	53.0	55.0	45.0
20-24 years	15.8	18.0	19.5	20.8	22.0	16.0

Source: Connecticut Interregional Planning Program, Connecticut Development Commission, Population, Technical Report 131, November, 1962, p. 70.

Table B-15 shows the projected school enrollment rates in Connecticut through the year 2000. Based on the probable improvement in the economic and social conditions of the population, the possible development of State Colleges, and Regional Community Colleges in heavily populated areas, we expect that the forecasts for the 18-19 year old group are conservative and that those for the 20-24 year old group are very low.

We conclude that a sizable increase in college attendance can be predicted on the basis of social and economic improvements. Furthermore, we believe that the State College system has an obligation to remedy any inequities in the percentage of attendance of female to male students as well as that of non-white to white students. Such redress is likely to increase enrollments from the urban core cities.

Commentary

This state-wide view of Connecticut's growth gives rise to the following summary comments which are relevant to our assignment. These have been discussed in the other parts of our report and are repeated here for the convenience of the reader.

1. Connecticut's population will continue to grow and the percentage of students in the college-age group may presently be underestimated.
2. The State College's share of that enrollment may be understated.
3. Much of the population growth will occur through natural increase, rather than in-migration. The State Colleges could thus play an important cultural and economic development role in overcoming possible problems resulting from a change in the components of the population.

4. Income will rise but a significant number of families may still face difficulties in providing college education for their children. The State Colleges should be accessible to these groups.

5. Population growth in each of the seven largest regions is sufficient in itself to support a public four-year college in each region by 1980.

6. If new campuses are to be developed, the following regions should have priority: the Southwestern Region, the Southeastern Region, and the Capitol Region.

7. The compactness of the state, its urbanization pattern, and highway network place many regions and institutions within reasonable commuting distance of each other; thus a regional pattern of State College development may not be necessary.

8. Manufacturing will continue to play an important role in the State's economy, though most of the new jobs will be in the service industries. State College programs may be developed around these changing conditions.

9. Educational achievement continues to improve; however, the percentages of female and non-white students enrolled is lower than male and white students enrolled. Improvements are desirable and if achieved would, of course, be a factor in raising enrollments in the State Colleges.

BIBLIOGRAPHY

Capitol Region Planning Agency. Proposed Plan for the Capitol Region: Part I - General Land Use. Hartford, Connecticut. February, 1964.

Capitol Region Planning Agency. Seventh Annual Report, 1965-1966. Planners Press, Hartford, Connecticut. May, 1966.

Central Naugatuck Valley Regional Planning Agency. Land Use Controls, Zoning Regulations: An Analysis of the Potential Population. Waterbury, Connecticut. 1962.

Central Naugatuck Valley Regional Planning Agency. Population and Housing: An Analysis of Trends. Waterbury, Connecticut. 1963.

Central Naugatuck Valley Regional Planning Agency. Regional and Municipal Population Estimates. Waterbury, Connecticut. 1966.

Connecticut Department of Agriculture and Natural Resources, Connecticut Development Commission, and Connecticut State Highway Department. Connecticut Comprehensive Statewide Outdoor Recreation Plan, 1965-1970. Prepared by Vollmer Associates. 1965.

Connecticut Development Commission. The Advantages of a Connecticut Location for Industrial Research Laboratories. March, 1964.

Connecticut Development Commission. Connecticut Market Data. Prepared by Business and Industrial Development Division. 1966.

Connecticut Development Commission. Connecticut Reference Manual of Industrial Location Factors. 1964.

Connecticut Development Commission. Connecticut's Manufacturing Economy. 1962 Edition.

Connecticut Development Commission. Steps to the Establishment of Regional Planning Agencies in Connecticut. Revised 1965, Community Development Division, State Office Building.

Connecticut Interregional Planning Program, Connecticut Development Commission. Connecticut Takes Stock for Action. State of Connecticut. June, 1964.

Connecticut Interregional Planning Program, Connecticut Development Commission. Government Organization. Technical Report 156. August, 1964.

Connecticut Interregional Planning Program, Connecticut Development Commission. Housing: A Report on Residential Structures and Households in Connecticut, 1900-2000. Technical Report 126. Connecticut Development Commission in cooperation with Connecticut Public Works Department. February, 1963.

Connecticut Interregional Planning Program, Connecticut Development Commission. Labor Force. Technical Report 132. December, 1962.

Connecticut Interregional Planning Program, Connecticut Development Commission. The Physical Geography of Connecticut. Technical Report 111. September, 1963.

Connecticut Interregional Planning Program, Connecticut Development Commission. Population. Technical Report 131. November, 1962.

Connecticut Interregional Planning Program, Connecticut Development Commission. Public Finance. Technical Report 157. November, 1963.

Connecticut Interregional Planning Program, Connecticut Development Commission. Service Industries. Technical Report 144. September, 1963.

Connecticut Interregional Planning Program. Connecticut's Population and Labor Force by Industry Group, 1930-2000. Hartford, Connecticut, revised July, 1965. (Tables)

Connecticut Interregional Planning Program. "Preliminary Town Population Projections." Connecticut Interrregional Planning Program News, Volume 2, Number 3. August, 1966.

Connecticut Secretary of State. Register and Manual, 1966. Hartford, Connecticut. 1966.

Connecticut Study Commission on Higher Education. Report to the Governor and the General Assembly by the Study Commission on Higher Education. Hartford, Connecticut. February, 1965.

Danbury City Planning Commission. Danbury, Connecticut: Plan of Development. Prepared for the Danbury City Planning Commission and the Connecticut Development Commission by the Technical Planning Associates, Incorporated, Consultants. August, 1958.

Danbury Town Planning Commission. Town of Danbury, Connecticut: Plan of Development. Prepared for the Danbury Town

Planning Commission and the Connecticut Development Commission by the Technical Planning Associates, Incorporated, Consultants. July, 1960.

Goodwin, Dorothy C. Estimation of Demand for Collegiate Spaces Originating in Connecticut, and of Distribution of Collegiate Spaces among Connecticut Institutions, through 1975. Revised June 7, 1966.

Greater Waterbury Chamber of Commerce. Central Naugatuck Valley Regional Industrial Site Tour. Waterbury, Connecticut. Spring, 1965.

Hollis, Ernest V., Executive Officer; Stout, Minard W., Survey Director; and staff Members of the Office of Education, U.S. Department of Health, Education, and Welfare. Higher Education in Connecticut, Report of a Survey. Volumes I and II. Prepared for the State of Connecticut Study Commission on Higher Education. December, 1964.

Little, Arthur D., Inc. Projective Economic Studies of New England. Prepared as part of the Comprehensive Planning Program for the Development and Conservation of Water Resources, U.S. Army Engineer Division, New England, Corps of Engineers, Waltham, Massachusetts. 1964-1965.

Midstate Regional Planning Agency. Study of the Economy. Middletown, Connecticut. September, 1966.

Regional Plan Association, Inc. Spread City: Projection of Development Trends and the Issues They Pose: The Tri-State New York Metropolitan Region, 1960-1985. Bulletin 100. September, 1962.

South Central Connecticut Regional Planning Agency. Issues, Policies, Strategies. Hamden, Connecticut. July, 1966.

South Western Regional Planning Agency. Land Use: Technical Report #2. Norwalk, Connecticut. September, 1966.

South Western Regional Planning Agency. Population: Technical Report #1. Norwalk, Connecticut. 1966.

Southeastern Connecticut Regional Planning Agency. Alternative Land Use Plans. Norwich, Connecticut. March, 1966.

Southeastern Connecticut Regional Planning Agency. Land Use: Patterns and Policies. Norwich, Connecticut. December, 1962.

Southeastern Connecticut Regional Planning Agency. Population and Housing. Norwich, Connecticut. December, 1963.

Southeastern Connecticut Regional Planning Agency. Regional Economy. Norwich, Connecticut. May, 1964.

State Colleges of Connecticut: Central Connecticut State College, Danbury State College, Southern Connecticut State College, and Willimantic State College. Four College Fact Book. Fall, 1965

Stockwell, Edward G. Illustrative Projection of the Population of the New England States by Age and Sex, 1960 to 1980. Progress Report No. 51, Connecticut population Report No. 7. University of Connecticut, Agricultural Experiment Station, Storrs, Connecticut. January, 1963.

Stockwell, Edward G. The Population of Connecticut: Town and County Fact Book, 1960. Bulletin No. 380. University of Connecticut, Agricultural Experiment Station, Storrs, Connecticut. January, 1964.

Stockwell, Edward G. and Ingalls, Dorothy G. The Population of Connecticut, Illustrative Projections, by Age and Sex, 1960-1980. University of Connecticut, Agricultural Experiment Station, Storrs, Connecticut. Bulletin 375. January, 1963.

U.S. Bureau of the Census. Current Population Reports, Series P-25, No. 326, "Illustrative Projections of the Population of States: 1970 to 1985". U.S. Government Printing Office. Washington, D. C. 1965.

U.S. Bureau of the Census. Statistical Abstract of the United States: 1966. (87th edition) Washington, D. C. 1966.

U.S. Bureau of the Census. U.S. Census of Population: 1960. Detailed Characteristics. Connecticut. Final Report PC (1)-8D. U.S. Government Printing Office. Washington, D. C. 1962.

U.S. Department of Health, Education, and Welfare, Office of Education. Digest of Educational Statistics, 1965 Edition. Prepared by Kenneth A. Simon and W. Vance Grant. U.S. Government Printing Office, Washington, D.C. 1965.

Wilder, David E. An Assessment of the Community Needs of Danbury, Connecticut, and the Potential Role of Danbury State College in Community Service, report written under the auspices of the Bureau of Applied Social Research, Columbia University. October, 1966.

Windham Planning Commission. *Development Policy, Needs and Standards; General Guide for Implementation of the Plan; Evaluation of Willimantic Zoning Regulations; Capital Improvement Program*. Prepared by Bryan & Panico, Planning Consultants. September, 1965.

Windham Planning Commission. *Evaluation of Existing and Potential Development in the Town of Windham and City of Willimantic, Connecticut*. Prepared by Bryan & Panico, Planning Consultants. September, 1965.

Windham Planning Commission. *Neighborhood Analysis Study of the Town of Windham and City of Willimantic, Connecticut*. Prepared by Bryan & Panico, Planning Consultants. September, 1965.

Academy for Educational Development, Inc. *Teacher Education - An Urgent Matter*. A Report to the Commission for Higher Education, State of Connecticut. October, 1966.

Braumbaugh, A. J., *Research Designed to Improve Institutions of Higher Learning*. Prepared for the Office of Statistical Information and Research of the American Council on Education. Washington, D. C. April, 1960.

Connecticut State Colleges. *Budget Requests for 1967-1969*.

Orvis, Paul, Consultant. *Design for Opportunity: A Plan for a State System of Community Colleges in Connecticut*. Prepared for the State Board of Trustees for Regional Community Colleges. State Capitol, Hartford, Connecticut. December, 1965.

Port of New York Authority. *The Next Twenty Years: A Forecast of Population and Jobs in the New York - New Jersey - Connecticut Metropolitan Region 1965-1985*. New York, N.Y. August, 1966.

Wilder, David E. *An Assessment of the Community Needs of Danbury, Connecticut and the Potential Role of Danbury State College in Community Service*. A Final Report. Columbia University: Bureau of Applied Research. October, 1966.

APPENDIX C

PRELIMINARY ESTIMATE OF PROBABLE DEVELOPMENT COSTS FOR NEW CAMPUSES AND POSSIBLE TIME SCHEDULE

The following is a preliminary estimate of the probable development costs for opening new campuses on undeveloped land. The estimates reflect the following assumptions:

1. The first phase construction would accommodate 2,000 full-time students, of whom 1,000 would be in residence.
2. The College would basically be an undergraduate institution.
3. Extra-educational programs, continuing education, and part-time programs would utilize the space developed for the full-time programs. No special facilities are listed.
4. For purposes of this memorandum, the long-range size of the College would be 10,000 full-time students.
5. Development would be phased over a period of time, with future construction planned for reasonable increments of growth.
6. The initial stage has a complete set of facilities for all aspects of a balanced physical plant with the following exceptions:
    a. Specialized research facilities
    b. Auditorium
    c. Campus union
    d. Field house
    e. Museum
    f. Stadium
    g. Swimming pool
    h. Theatre
    i. Non-student housing
7. The preliminary costs do not include an estimate for utilities, since there are too many variables to use a rule of thumb.

8. The square footage estimates are based on general practices now current among public institutions of higher learning. They represent a high utilization factor. Construction costs represent prices in New England for 1965/66. With the exception of housing costs (which are calculated at the lower end of the cost scale), the other prices represent a medium range of quality of finish.
9. Please note these are generalized figures for long-range planning purposes only.

STATE COLLEGES OF CONNECTICUT
POSSIBLE DEVELOPMENT COSTS FOR 2,000 STUDENT NEW CAMPUS

BUILDING COSTS (See work sheets that follow)

1. Instructional space	$ 6,400,000.
2. Faculty offices	501,000.
3. Library	2,458,000.
4. Administration space	270,000.
5. Housing	4,000,000.
6. College health services	170,000.
7. Physical education/recreation	1,338,000.
8. Physical plant	180,000.
Total	$15,317,000.

SITE DEVELOPMENT (See work sheets that follow)

9. Development exclusive of costs included in 7 above	$ 840,000.

LAND ACQUISITION (See work sheets that follow)

10. 250 acres at $5,000./acre	1,250,000.

Total of items 1 through 10	$17,407,000.
Add 10% for fees and direct costs	1,740,700.
Total Development Cost Exclusive of Utilities:	$19,147,700.
Rounded:	$20,000,000.

STATE COLLEGES: NEW CAMPUS DEVELOPMENT COSTS
PRELIMINARY ESTIMATES - WORK SHEETS

1. INSTRUCTIONAL AND RELATED SPACE ($6,400,000)

Initial construction for 2,000 students at 100 square feet gross per student: 200,000 square feet gross.

Allocated as follows:

a. General classroom, seminar, departmental offices, non-specialized instructional space:
50% or 100,000 @ $25./sq.ft. . . . . $2,500,000.

b. Specialized laboratory space:
25% of 50,000 @ $45./sq.ft. . . . . 2,250,000.

c. Specialized instructional space such as demonstration rooms, language rooms, etc.:
25% or 50,000 @ $33./sq.ft. . . . . 1,650,000.
Total instructional space . . . . $6,400,000.

2. FACULTY OFFICES ($501,000)

Computed at one faculty member per 12 students, or 167 faculty members; 120 square feet per faculty member: 20,000 @ $25./sq.ft. . . . . $ 501,000.

3. LIBRARY ($2,458,400)

200,000 volumes @ 10 vols/sq.ft. --20,000 sq.ft. net
800 seats (40%) @ 20/sq.ft. --16,000 sq.ft. net
Service space at 20% of above -- 7,200 sq.ft. net
43,200 sq.ft. net
Conversion from net to gross, x1.5--64,800 sq.ft. gross, rounded
Construction cost @ $33./sq.ft. . . . . $2,138,000., rounded
40,000 volumes initial purchase @ $8./volume . . . . 320,000.
Total library cost . . . . $2,458,000.

N.B.: All figures are gross sq.ft. unless otherwise indicated.

4. ADMINISTRATION SPACE ($270,000)

Space for President and other senior administrators, supporting staff, conference room, waiting areas, etc.:

10,000 square feet @ $27./sq.ft. . . . . $ 270,000.

5. HOUSING ($4,000,000)

1,000 units at $4,000./unit . . . . $4,000,000.

6. COLLEGE HEALTH SERVICES ($170,000)

Small infirmary, out-patients' space, nurse and doctors' quarters, etc.:

20 beds @ 160 sq.ft./	3,200 sq.ft. net	
4 offices @ 150 sq.ft./	600 sq.ft. net	
Reception and storage	400 sq.ft. net	
Total net	4,200 sq.ft.	
Conversion from net to gross, x1.5	6,300 sq.ft.	
Construction cost @ $27./sq.ft.		$ 170,000.

7. PHYSICAL EDUCATION, ATHLETICS AND RECREATION ($1,338,000)

Multi-use gymnasium and related rooms and facilities calculated at 35,000 square feet gross at $30./sq.ft. . . . . $1,050,000.

Outdoor playfields, general:

4 softball fields	250,000 sq.ft.	
1 baseball field	122,000 sq.ft.	
4 touch football/soccer/ lacrosse fields	340,000 sq.ft.	
Total	712,000 sq.ft.	
Or about 16 acres @ $4,000/acre		64,000.

Outdoor playfields, special:

10 tennis courts at $8,000/court.	80,000.
8 badminton/volleyball courts: 18,000 sq.ft. @ $4./sq.ft.	72,000.
2 basketball courts: 18,000 sq.ft. @ $4./sq.ft.	72,000.

8. PHYSICAL PLANT ($180,000)

Storage, buildings and grounds area, shops, etc. 10,000 sq.ft. @ $18./sq.ft.	$ 180,000.

9. SITE DEVELOPMENT ($840,000)

Grading, seeding, planting and drainage of 60 acres @ $3,000./acre	$ 180,000.
Interior road development	250,000.
Parking: 700 spaces @ $300./space	210,000.
Special outdoor landscape spaces	100,000.
Exterior lighting and security	100,000.

STATE COLLEGES OF CONNECTICUT - NEW CAMPUS DEVELOPMENT
ESTIMATED ACREAGE REQUIREMENTS FOR A 10,000 STUDENT CAMPUS, UNDEVELOPED SITE

BUILDING SPACE (74 ACRES)

1. Instructional space (5 x phase 1) .	1,000,000	sq.ft.
2. Faculty offices (5 x phase 1) . . .	100,000	
3. Library space (4 x phase 1)	259,000	
4. Administration space (3 x phase 1)	30,000	
5. Housing (5 x phase 1)	1,400,000	
6. College health services (5 x phase 1)	32,000	
7. Indoor physical education, etc. (3 x phase 1)	105,000	
8. Physical plant (3 x phase 1) . . .	30,000	
9. Special facilities not in phase 1	250,000	
Possible total building space . . .	3,206,000	sq.ft.
Acres of building space	74	acres
Assuming buildings averaging four floors, total acreage covered by buildings:	18.4	acres
Assuming a ratio of 3 acres of open space for every acre covered by buildings; acreage required:	73.6	acres

OTHER DEVELOPED OPEN SPACE

1. Outdoor play areas (2 x phase 1).	35	acres
2. Parking (5 x phase 1, or 3500 cars @ 100/acre)	35	acres
3. Physical plant outdoor areas	20	acres
4. General Amenity	20	acres
5. Interior roads at 5% of the above	6	acres
Developed acres	116	acres

UNDEVELOPED LAND RESERVE

Estimated at 25% of the above totals (190 acres rounded), add 50 acres.

TOTALS

Land for buildings	74 acres
Other developed open space	116 acres
Land reserve	50 acres
	240 acres, unrounded
	250 acres, rounded

POSSIBLE TIME SCHEDULE FOR DEVELOPMENT OF NEW CAMPUS

We now estimate that it would take a minimum of five years to complete a major construction program ($20 million) for a new campus for a four-year public college in Connecticut.

The five years is estimated from the date of approval to begin a new campus and an appropriation for the first two years' work.

The major activities in each of those five years and the estimated time of accomplishment is listed below. By applying critical path techniques, revising present administrative procedures for construction of public buildings in Connecticut, and reducing the time span for site selection, perhaps one year could be reduced from the schedule.

Assuming, for purposes of this memorandum, that approval for new campuses were given by June 1967 and appropriations were secured for the first two years of work, then the probable earliest opening date would be Fall 1972.

YEAR ONE

Site selection and preparation for $20 million construction.

a. Establish and agree upon site selection criteria:	3 months
b. Apply site selection criteria	3 months
c. Purchase site:.	6 months
d. Development of educational specifications for campus:. . . . . (concurrent activity)	12 months

YEAR TWO

Preparation of master plan and preliminary designs for first phase construction.

a. Program for the long-range plan:	3 months
b. Design and approval of long-range plan: . . .	6 months
c. Program for first phase construction:	3 months
d. Preliminary design of first phase buildings:	3 months

YEAR THREE

Site clearance, final building designs, working drawings, bidding and award of contracts, start of construction:

a. Final building design, working drawings, and approval: 6 months

b. Awarding of bids and beginning of construction: 3 months

c. Site clearance: . . . . 3 months

YEARS FOUR AND FIVE

Construction and Fitting Out

Note: We estimate two years for building construction and fitting out of a $20 million development program.

APPENDIX D

RELOCATION CONSIDERATIONS

Danbury State College

Our recommendation to relocate Danbury State College to a site where it can more effectively serve the needs of both Danbury and the Southwestern Region depends in part on finding a suitable reuse for the existing campus. We believe that such reuses do exist and that they can play an important part in a revitalization of the community. Our reasoning is based on an examination of the historic growth of the community and its changing economic base.

Danbury was settled in 1685 and incorporated two years later. For two centuries, it served as an agricultural market town. In the 19th century, hat manufacturing began, prospered, and grew to the exclusion of almost all other employment. Danbury continued to be a one-industry town until World War II, when the hatting industry collapsed.

The area did not, however, experience widespread unemployment and economic depression. With excellent power, water, transportation, labor market, and retail facilities, Danbury was in a good position to attract and to hold a variety of new manufacturing companies. This expansion was triggered, in part, by the population growth and changing industrial location pattern in the northern tiers of the New York metropolitan area.

Today, 43 per cent of the labor force is employed in manufacturing. Twenty-six per cent of this is in electrical equipment and non-electrical machinery. More recently, engineering, research, and chemical firms have come into the area. Industries continue to find land, around Danbury and to the north, more available and less expensive than along the more densely settled Connecticut coast.

For the executive groups, the areas outside Danbury provide attractive housing, cultural activities, and recreation--yet proximity to place of work.

With the completion of U.S. Interstate Route 84 to the north and south, and Route 7, east and west, commuting and travel distances from Danbury to other parts of the state will be shortened. Norwalk, for example, will be less than a half hour away.

In perspective, Danbury has an excellent location and can be expected to grow to a viable regional center, if present problems can be overcome and the economic forces and trends wisely guided.

Problems

Danbury is an old community, whose physical form is obsolete in many ways. The oldest urban areas continue in use as they are filled by relatively low income families drawn by job opportunities in the city.

These new-comers are increasing, particularly a growing Negro population. While no real ghettos have developed, Danbury faces deteriorating housing, traffic congestion, and other typical urban problems. These problems are further reflected in Danbury's population statistics: its low average household size, a large elderly population, a relatively low median family income, and low median educational attainment.

The leadership in the community recognizes some of the issues, and progressive steps have been taken towards improvement. A flood-control, urban-renewal project in the downtown area is in its final stages. This project, involving some complete clearance, new bridges, and roads, will help revitalize the city. Programs are underway to improve housing conditions and to increase the variety of housing and community facilities available.

A badly needed nine million dollar school bond issue was passed in 1962. On 1 January 1965, the Town and City governments were consolidated for better municipal services.

The College's role in all of this activity has possibly not been as strong as it might have been if it had a stronger image in the community, had greater autonomy in handling its affairs, and could establish formal working relationships with other organizations and institutions in Danbury.[1]

The College Site

Danbury State College is located about one mile from the downtown in a medium-dense section of the city (six to twelve families per acre). The buildings in the area are mostly old but generally in good condition, except the White Street area which has some blighted structures. (The Danbury Redevelopment Agency has made application to the Federal Government for funds to plan a project involving re-use of some of these land parcels in connection with State College expansion plans. This project is in the preliminary planning stage and currently is being reviewed in Washington, D.C. Implementation of the scheme may be a drawn-out process because of cutbacks in Federal programs.)

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[1] These matters are well spelled out in a study completed in October, 1966, by the Bureau of Applied Social Research at Columbia University entitled: An Assessment of the Community Needs of Danbury, Connecticut, and the Potential Role of Danbury State College in Community Service. The study identified the following community problems:

1. Poverty, the Negro and Human Relations
2. Planning and Growth
3. Cultural and Intellectual Leadership
4. Government and Politics
5. Educational and Research Facilities

Considering the College itself, the study pointed out that the community leadership unanimously wants the College to expand and become a more effective force in the community. The study recommended that the College change its image in the community and possibly its name (to perhaps Charles Ives College or Berkshire College); that the College be given more autonomy by the State in order to innovate and to develop its potential; and that the College establish formal affiliations and communication with existing agencies and institutions throughout the area. Other recommendations included enlarged course offerings relevant to community needs, scholarships for low income students, and cultural programs.

The report also mentioned that the College needs more publicity in the area. (At least twice as many students at Danbury State College come from the northern section as from the southern section of Fairfield County. The College would need very strong programs to attract the coastal urbanites.)

Since most of the students living on campus do not have a car, transportation to and from the site is a problem. Though there is a drugstore and two snack bars nearby, students must walk to downtown for other shopping and church services. Public bus service is limited--with half hour or hourly schedules, and no service after 6 P.M. or Sundays.

Earlier in this report we described other physical constraints that must be faced in expanding the present campus--including the high cost of land acquisition and expensive site development. We suggested re-use of the site for community college and technical institute programs.

We believe that the latter programs would greatly enhance the present economic base of the community. They can serve as a threshold for students who live in the city and desire some form of education beyond high school, but are not qualified for admittance to a four-year college. Such institutions also have greater flexibility than a residential teacher training and liberal arts college in providing continuing education and specialized vocational training programs.

On the question of the College's commitment to participate in local redevelopment, we note that if Danbury State College does not expand on its present site, the land designated for its use in the adjacent White Street renewal project, might become a mixed income housing area.

At eight families to the acre, a new neighborhood of 200 families could be developed across the street from a community-oriented educational institution--one that had land for outdoor recreation as well as cultural programs.

Perhaps some of the housing could be used for elderly people and other units for lower-income families for whom proximity to the institution would mean an unusual chance for self-improvement.

Whatever the disposition of the White Street property, we believe the best course for Danbury to pursue in developing its public, higher-educational facilities, is to support a four-year comprehensive college of excellence within reasonable commuting distance of the City and to launch a specialized college on the present campus of Danbury State College.

Willimantic State College

We have proposed the relocation of Willimantic State College on the basis that a new campus is needed to allow the College to meet its obligations to provide better programs in teacher preparation and an enlarged comprehensive college curriculum at a site accessible to a greater number of people. Some comments on the prospects for growth in the city of Willimantic and the town of Windham, and possible re-use of the campus, are thus in order.

The city is located in eastern Connecticut about 28 miles east of Hartford, 15 miles north of Norwich, and about eight miles from Storrs--the University of Connecticut's main campus.

The town as a whole is very rural, with a population density of around 600 people to the square mile. Surrounding towns have even lower densities, and only five per cent of the land is urbanized.

In 1960, the Windham Region had 48,732 people; Windham Town had 16,973 people; and the city of Willimantic, 13,881 people.

The city today is the retail, government, and employment center of the area. It is expected to hold this position in the future--though no significant growth is expected in the population or the economic activity at this time.

The Connecticut Interregional Planning Program population projections are as follows:

	1960	1980
Windham Region	48,732	74,166
Windham Town	16,973	20,203

The recent employment picture actually shows a gradual decline from 1950 to 1963--the date of last available statistics.

(June)	1950	1960	1963
Non-manufacturing employment	1,888	2,283	2,399
Manufacturing employment	5,327	4,524	4,083
Total employment	7,215	6,807	6,482

Approximately 30 per cent of the labor force in 1960 worked as operatives, compared to the state's 23 per cent. The largest industry groups by employment in 1961 were textiles and fabricated metals, with 1,900 employees each in the whole Windham Region. Together they represent 83 per cent of the regional manufacturing employment. This contrasts sharply with state industrial growth in machinery, electrical equipment, and other higher income industries.

Windham-Willimantic has a relatively low median family income , a low percentage of young children and adults in the 25-44 age group, and a high percentage of persons 65 and over, when compared to state statistics.

Future Growth

We believe that any significant new community growth in Willimantic will have to be generated by exceptional investments in area development programs that build up the obsolete infrastructure of the community and create more industrial based job opportunities.

Streamlining of local government[2], widespread support of community planning and development, and the opening of new highways and expressways to connect Willimantic to the Hartford-New Britain mega-city and to the urban areas of the coast will be needed.

Some of these regional measures, however, will also help other local communities such as Coventry, Mansfield, Norwich and Colchester. Willimantic's competitive position vis-a-vis these other communities may not significantly improve.

The triggering of industrial-based development might be furthered in this situation by establishing and maintaining, in Willimantic, a strong pool of skilled workers and by taking advantage of possible University related research and development opportunities.

The first goal may be achieved through new regional Community College programs using the existing campus or expansion of the programs at Windham Regional Vocational School. Inasmuch as the existing campus is adjacent to the School property, perhaps both educational activities can be coordinated to meet a common objective.

The second goal seems quite manageable inasmuch as the University of Connecticut is so close--much closer than the well publicized new Route 128 industries (in Boston) are to the university resources which spawned some of their growth.

Affiliation and support from the University, with its many technical and engineering departments and programs, may offer more substantial help in economic development than support from a residential teacher training and liberal arts college. This is not to denigrate the educational, social, and cultural roles which Willimantic State College can play in community progress. But the triggering of industrial development is more likely to come from the university than the college level.

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[2] The physical plant of the City has not been kept up-to-date. The separation of functions between the Town of Windham and the City of Willimantic is a cumbersome thing. The City and the Town divide responsibilities for street and road repairs, fire protection, police, sanitation, etc. There is no zoning operating in the Town, only in the City. Comprehensive planning has just begun.

In our view the College should be relocated to serve a larger number of people, and the relocation should be done so that the existing campus can be used for educational programs especially suited to industrial development in Willimantic.